

すきぷり 中学数学

文字式の計算【乗除】

もくじ

文字式の計算【乗除】

1次式との乗除

文字式の計算【分配法則】

問題

次の計算をしましょう。

1

$$-35f \div (-7)$$

2

$$-7k \times 9$$

3

$$-24w \div 8$$

4

$$-2z \times 6$$

5

$$-6n \times (-4)$$

6

$$-7v \times (-3)$$

7

$$-14y \div (-7)$$

8

$$-30m \div 5$$

9

$$-6a \times (-3)$$

10

$$-56x \div (-8)$$

1

$$\begin{aligned} -35f \div (-7) &= -35f \times \left(-\frac{1}{7}\right) \\ &= -35 \times \left(-\frac{1}{7}\right) \times f \\ &= 5f \end{aligned}$$

2

$$\begin{aligned} -7k \times 9 &= -7 \times 9 \times k \\ &= -63k \end{aligned}$$

3

$$\begin{aligned} -24w \div 8 &= -24w \times \frac{1}{8} \\ &= -24 \times \frac{1}{8} \times w \\ &= -3w \end{aligned}$$

4

$$\begin{aligned} -2z \times 6 &= -2 \times 6 \times z \\ &= -12z \end{aligned}$$

5

$$\begin{aligned} -6n \times (-4) &= -6 \times (-4) \times n \\ &= 24n \end{aligned}$$

6

$$\begin{aligned} -7v \times (-3) &= -7 \times (-3) \times v \\ &= 21v \end{aligned}$$

7

$$\begin{aligned} -14y \div (-7) &= -14y \times \left(-\frac{1}{7}\right) \\ &= -14 \times \left(-\frac{1}{7}\right) \times y \\ &= 2y \end{aligned}$$

8

$$\begin{aligned} -30m \div 5 &= -30m \times \frac{1}{5} \\ &= -30 \times \frac{1}{5} \times m \\ &= -6m \end{aligned}$$

9

$$\begin{aligned} -6a \times (-3) &= -6 \times (-3) \times a \\ &= 18a \end{aligned}$$

10

$$\begin{aligned} -56x \div (-8) &= -56x \times \left(-\frac{1}{8}\right) \\ &= -56 \times \left(-\frac{1}{8}\right) \times x \\ &= 7x \end{aligned}$$

1

$$2z \times 5$$

2

$$-10y \div 2$$

3

$$4b \times 8$$

4

$$24x \div 3$$

5

$$10j \div 2$$

6

$$-2s \times (-6)$$

7

$$-7s \times (-9)$$

8

$$-7h \times 7$$

9

$$36r \div (-9)$$

10

$$-8y \div 2$$

1

$$\begin{aligned}2z \times 5 &= 2 \times 5 \times z \\ &= 10z\end{aligned}$$

2

$$\begin{aligned}-10y \div 2 &= -10y \times \frac{1}{2} \\ &= -10 \times \frac{1}{2} \times y \\ &= -5y\end{aligned}$$

3

$$\begin{aligned}4b \times 8 &= 4 \times 8 \times b \\ &= 32b\end{aligned}$$

4

$$\begin{aligned}24x \div 3 &= 24x \times \frac{1}{3} \\ &= 24 \times \frac{1}{3} \times x \\ &= 8x\end{aligned}$$

5

$$\begin{aligned}10j \div 2 &= 10j \times \frac{1}{2} \\ &= 10 \times \frac{1}{2} \times j \\ &= 5j\end{aligned}$$

6

$$\begin{aligned}-2s \times (-6) &= -2 \times (-6) \times s \\ &= 12s\end{aligned}$$

7

$$\begin{aligned}-7s \times (-9) &= -7 \times (-9) \times s \\ &= 63s\end{aligned}$$

8

$$\begin{aligned}-7h \times 7 &= -7 \times 7 \times h \\ &= -49h\end{aligned}$$

9

$$\begin{aligned}36r \div (-9) &= 36r \times \left(-\frac{1}{9}\right) \\ &= 36 \times \left(-\frac{1}{9}\right) \times r \\ &= -4r\end{aligned}$$

10

$$\begin{aligned}-8y \div 2 &= -8y \times \frac{1}{2} \\ &= -8 \times \frac{1}{2} \times y \\ &= -4y\end{aligned}$$

1

$$10m \div 5$$

2

$$-8s \times 2$$

3

$$4h \times (-7)$$

4

$$4k \div (-2)$$

5

$$7z \times 9$$

6

$$5w \times (-3)$$

7

$$-5f \times (-7)$$

8

$$-42d \div 7$$

9

$$-8c \times (-2)$$

10

$$-14b \div (-2)$$

1

$$\begin{aligned}10m \div 5 &= 10m \times \frac{1}{5} \\ &= 10 \times \frac{1}{5} \times m \\ &= 2m\end{aligned}$$

2

$$\begin{aligned}-8s \times 2 &= -8 \times 2 \times s \\ &= -16s\end{aligned}$$

3

$$\begin{aligned}4h \times (-7) &= 4 \times (-7) \times h \\ &= -28h\end{aligned}$$

4

$$\begin{aligned}4k \div (-2) &= 4k \times \left(-\frac{1}{2}\right) \\ &= 4 \times \left(-\frac{1}{2}\right) \times k \\ &= -2k\end{aligned}$$

5

$$\begin{aligned}7z \times 9 &= 7 \times 9 \times z \\ &= 63z\end{aligned}$$

6

$$\begin{aligned}5w \times (-3) &= 5 \times (-3) \times w \\ &= -15w\end{aligned}$$

7

$$\begin{aligned}-5f \times (-7) &= -5 \times (-7) \times f \\ &= 35f\end{aligned}$$

8

$$\begin{aligned}-42d \div 7 &= -42d \times \frac{1}{7} \\ &= -42 \times \frac{1}{7} \times d \\ &= -6d\end{aligned}$$

9

$$\begin{aligned}-8c \times (-2) &= -8 \times (-2) \times c \\ &= 16c\end{aligned}$$

10

$$\begin{aligned}-14b \div (-2) &= -14b \times \left(-\frac{1}{2}\right) \\ &= -14 \times \left(-\frac{1}{2}\right) \times b \\ &= 7b\end{aligned}$$

1

$$-27n \div (-3)$$

2

$$7j \times (-8)$$

3

$$-8n \times (-9)$$

4

$$-4n \times 3$$

5

$$-32v \div (-8)$$

6

$$-40r \div (-8)$$

7

$$35f \div 7$$

8

$$3c \times (-9)$$

9

$$18r \div 2$$

10

$$-12v \div (-3)$$

1

$$\begin{aligned} -27n \div (-3) &= -27n \times \left(-\frac{1}{3}\right) \\ &= -27 \times \left(-\frac{1}{3}\right) \times n \\ &= 9n \end{aligned}$$

2

$$\begin{aligned} 7j \times (-8) &= 7 \times (-8) \times j \\ &= -56j \end{aligned}$$

3

$$\begin{aligned} -8n \times (-9) &= -8 \times (-9) \times n \\ &= 72n \end{aligned}$$

4

$$\begin{aligned} -4n \times 3 &= -4 \times 3 \times n \\ &= -12n \end{aligned}$$

5

$$\begin{aligned} -32v \div (-8) &= -32v \times \left(-\frac{1}{8}\right) \\ &= -32 \times \left(-\frac{1}{8}\right) \times v \\ &= 4v \end{aligned}$$

6

$$\begin{aligned} -40r \div (-8) &= -40r \times \left(-\frac{1}{8}\right) \\ &= -40 \times \left(-\frac{1}{8}\right) \times r \\ &= 5r \end{aligned}$$

7

$$\begin{aligned} 35f \div 7 &= 35f \times \frac{1}{7} \\ &= 35 \times \frac{1}{7} \times f \\ &= 5f \end{aligned}$$

8

$$\begin{aligned} 3c \times (-9) &= 3 \times (-9) \times c \\ &= -27c \end{aligned}$$

9

$$\begin{aligned} 18r \div 2 &= 18r \times \frac{1}{2} \\ &= 18 \times \frac{1}{2} \times r \\ &= 9r \end{aligned}$$

10

$$\begin{aligned} -12v \div (-3) &= -12v \times \left(-\frac{1}{3}\right) \\ &= -12 \times \left(-\frac{1}{3}\right) \times v \\ &= 4v \end{aligned}$$

1

$$40y \div (-8)$$

2

$$9s \div (-3)$$

3

$$-63f \div 7$$

4

$$32b \div 8$$

5

$$21r \div (-7)$$

6

$$27y \div (-9)$$

7

$$9z \times 2$$

8

$$9x \times 6$$

9

$$-72a \div (-9)$$

10

$$15v \div (-5)$$

1

$$\begin{aligned} 40y \div (-8) &= 40y \times \left(-\frac{1}{8}\right) \\ &= 40 \times \left(-\frac{1}{8}\right) \times y \\ &= -5y \end{aligned}$$

2

$$\begin{aligned} 9s \div (-3) &= 9s \times \left(-\frac{1}{3}\right) \\ &= 9 \times \left(-\frac{1}{3}\right) \times s \\ &= -3s \end{aligned}$$

3

$$\begin{aligned} -63f \div 7 &= -63f \times \frac{1}{7} \\ &= -63 \times \frac{1}{7} \times f \\ &= -9f \end{aligned}$$

4

$$\begin{aligned} 32b \div 8 &= 32b \times \frac{1}{8} \\ &= 32 \times \frac{1}{8} \times b \\ &= 4b \end{aligned}$$

5

$$\begin{aligned} 21r \div (-7) &= 21r \times \left(-\frac{1}{7}\right) \\ &= 21 \times \left(-\frac{1}{7}\right) \times r \\ &= -3r \end{aligned}$$

6

$$\begin{aligned} 27y \div (-9) &= 27y \times \left(-\frac{1}{9}\right) \\ &= 27 \times \left(-\frac{1}{9}\right) \times y \\ &= -3y \end{aligned}$$

7

$$\begin{aligned} 9z \times 2 &= 9 \times 2 \times z \\ &= 18z \end{aligned}$$

8

$$\begin{aligned} 9x \times 6 &= 9 \times 6 \times x \\ &= 54x \end{aligned}$$

9

$$\begin{aligned} -72a \div (-9) &= -72a \times \left(-\frac{1}{9}\right) \\ &= -72 \times \left(-\frac{1}{9}\right) \times a \\ &= 8a \end{aligned}$$

10

$$\begin{aligned} 15v \div (-5) &= 15v \times \left(-\frac{1}{5}\right) \\ &= 15 \times \left(-\frac{1}{5}\right) \times v \\ &= -3v \end{aligned}$$

問題

次の計算をしましょう。

①

$$-(-5y - 5)$$

②

$$4(10b - 2)$$

③

$$-8(3a - 10)$$

④

$$(-8x - 4) \div (-2)$$

⑤

$$(-2x + 3) \times (-8)$$

⑥

$$-5(-7y - 1)$$

⑦

$$-8(-a - 3)$$

⑧

$$10(3y - 5)$$

1

$$\begin{aligned} & -(-5y - 5) \\ & = -1 \times (-5y) - 1 \times (-5) \\ & = 5y + 5 \end{aligned}$$

2

$$\begin{aligned} 4(10b - 2) & = 4 \times 10b + 4 \times (-2) \\ & = 40b - 8 \end{aligned}$$

3

$$\begin{aligned} & -8(3a - 10) \\ & = -8 \times 3a - 8 \times (-10) \\ & = -24a + 80 \end{aligned}$$

4

$$\begin{aligned} & (-8x - 4) \div (-2) \\ & = (-8x - 4) \times \left(-\frac{1}{2}\right) \\ & = -8x \times \left(-\frac{1}{2}\right) - 4 \times \left(-\frac{1}{2}\right) \\ & = 4x + 2 \end{aligned}$$

5

$$\begin{aligned} & (-2x + 3) \times (-8) \\ & = -2x \times (-8) + 3 \times (-8) \\ & = 16x - 24 \end{aligned}$$

6

$$\begin{aligned} & -5(-7y - 1) \\ & = -5 \times (-7y) - 5 \times (-1) \\ & = 35y + 5 \end{aligned}$$

7

$$\begin{aligned} & -8(-a - 3) \\ & = -8 \times (-a) - 8 \times (-3) \\ & = 8a + 24 \end{aligned}$$

8

$$\begin{aligned} 10(3y - 5) & = 10 \times 3y + 10 \times (-5) \\ & = 30y - 50 \end{aligned}$$

①

$$8(9x + 6)$$

②

$$(7y - 7) \times 8$$

③

$$(4x + 6) \div (-2)$$

④

$$(-8y - 1) \times (-3)$$

⑤

$$3(4y + 6)$$

⑥

$$(24x - 56) \div (-8)$$

⑦

$$-9(2y - 10)$$

⑧

$$(2b - 6) \times 3$$

1

$$\begin{aligned} 8(9x + 6) &= 8 \times 9x + 8 \times 6 \\ &= 72x + 48 \end{aligned}$$

2

$$\begin{aligned} (7y - 7) \times 8 &= 7y \times 8 - 7 \times 8 \\ &= 56y - 56 \end{aligned}$$

3

$$\begin{aligned} (4x + 6) \div (-2) \\ &= (4x + 6) \times \left(-\frac{1}{2}\right) \\ &= 4x \times \left(-\frac{1}{2}\right) + 6 \times \left(-\frac{1}{2}\right) \\ &= -2x - 3 \end{aligned}$$

4

$$\begin{aligned} (-8y - 1) \times (-3) \\ &= -8y \times (-3) - 1 \times (-3) \\ &= 24y + 3 \end{aligned}$$

5

$$\begin{aligned} 3(4y + 6) &= 3 \times 4y + 3 \times 6 \\ &= 12y + 18 \end{aligned}$$

6

$$\begin{aligned} (24x - 56) \div (-8) \\ &= (24x - 56) \times \left(-\frac{1}{8}\right) \\ &= 24x \times \left(-\frac{1}{8}\right) - 56 \times \left(-\frac{1}{8}\right) \\ &= -3x + 7 \end{aligned}$$

7

$$\begin{aligned} -9(2y - 10) \\ &= -9 \times 2y - 9 \times (-10) \\ &= -18y + 90 \end{aligned}$$

8

$$\begin{aligned} (2b - 6) \times 3 &= 2b \times 3 - 6 \times 3 \\ &= 6b - 18 \end{aligned}$$

①

$$(9x + 10) \times (-6)$$

②

$$(-4x + 5) \times 8$$

③

$$(2a + 8) \times 4$$

④

$$(-5a + 8) \times (-1)$$

⑤

$$(b - 5) \times (-3)$$

⑥

$$(-8a + 4) \times (-4)$$

⑦

$$(45x - 10) \div 5$$

⑧

$$(-6y - 9) \times (-8)$$

1

$$\begin{aligned}(9x + 10) \times (-6) \\ &= 9x \times (-6) + 10 \times (-6) \\ &= -54x - 60\end{aligned}$$

2

$$\begin{aligned}(-4x + 5) \times 8 &= -4x \times 8 + 5 \times 8 \\ &= -32x + 40\end{aligned}$$

3

$$\begin{aligned}(2a + 8) \times 4 &= 2a \times 4 + 8 \times 4 \\ &= 8a + 32\end{aligned}$$

4

$$\begin{aligned}(-5a + 8) \times (-1) \\ &= -5a \times (-1) + 8 \times (-1) \\ &= 5a - 8\end{aligned}$$

5

$$\begin{aligned}(b - 5) \times (-3) \\ &= b \times (-3) - 5 \times (-3) \\ &= -3b + 15\end{aligned}$$

6

$$\begin{aligned}(-8a + 4) \times (-4) \\ &= -8a \times (-4) + 4 \times (-4) \\ &= 32a - 16\end{aligned}$$

7

$$\begin{aligned}(45x - 10) \div 5 \\ &= (45x - 10) \times \frac{1}{5} \\ &= 45x \times \frac{1}{5} - 10 \times \frac{1}{5} \\ &= 9x - 2\end{aligned}$$

8

$$\begin{aligned}(-6y - 9) \times (-8) \\ &= -6y \times (-8) - 9 \times (-8) \\ &= 48y + 72\end{aligned}$$

1

$$(7a + 3) \times (-4)$$

2

$$-7(2b + 2)$$

3

$$(36x + 81) \div (-9)$$

4

$$3(9b - 8)$$

5

$$(6a - 1) \times 7$$

6

$$9(-3y + 4)$$

7

$$(5y + 2) \times (-8)$$

8

$$-3(-b + 3)$$

1

$$\begin{aligned}(7a + 3) \times (-4) \\ &= 7a \times (-4) + 3 \times (-4) \\ &= -28a - 12\end{aligned}$$

2

$$\begin{aligned}-7(2b + 2) &= -7 \times 2b - 7 \times 2 \\ &= -14b - 14\end{aligned}$$

3

$$\begin{aligned}(36x + 81) \div (-9) \\ &= (36x + 81) \times \left(-\frac{1}{9}\right) \\ &= 36x \times \left(-\frac{1}{9}\right) + 81 \times \left(-\frac{1}{9}\right) \\ &= -4x - 9\end{aligned}$$

4

$$\begin{aligned}3(9b - 8) &= 3 \times 9b + 3 \times (-8) \\ &= 27b - 24\end{aligned}$$

5

$$\begin{aligned}(6a - 1) \times 7 &= 6a \times 7 - 1 \times 7 \\ &= 42a - 7\end{aligned}$$

6

$$\begin{aligned}9(-3y + 4) &= 9 \times (-3y) + 9 \times 4 \\ &= -27y + 36\end{aligned}$$

7

$$\begin{aligned}(5y + 2) \times (-8) \\ &= 5y \times (-8) + 2 \times (-8) \\ &= -40y - 16\end{aligned}$$

8

$$\begin{aligned}-3(-b + 3) &= -3 \times (-b) - 3 \times 3 \\ &= 3b - 9\end{aligned}$$

1

$$(-6a + 6) \times (-7)$$

2

$$(6a - 8) \times (-7)$$

3

$$(-5b + 2) \times (-2)$$

4

$$10(9a - 7)$$

5

$$-4(-6a + 4)$$

6

$$3(-a - 6)$$

7

$$4(-7a + 5)$$

8

$$(6b + 6) \times (-1)$$

1

$$\begin{aligned} & (-6a + 6) \times (-7) \\ &= -6a \times (-7) + 6 \times (-7) \\ &= 42a - 42 \end{aligned}$$

2

$$\begin{aligned} & (6a - 8) \times (-7) \\ &= 6a \times (-7) - 8 \times (-7) \\ &= -42a + 56 \end{aligned}$$

3

$$\begin{aligned} & (-5b + 2) \times (-2) \\ &= -5b \times (-2) + 2 \times (-2) \\ &= 10b - 4 \end{aligned}$$

4

$$\begin{aligned} 10(9a - 7) &= 10 \times 9a + 10 \times (-7) \\ &= 90a - 70 \end{aligned}$$

5

$$\begin{aligned} & -4(-6a + 4) \\ &= -4 \times (-6a) - 4 \times 4 \\ &= 24a - 16 \end{aligned}$$

6

$$\begin{aligned} 3(-a - 6) &= 3 \times (-a) + 3 \times (-6) \\ &= -3a - 18 \end{aligned}$$

7

$$\begin{aligned} 4(-7a + 5) &= 4 \times (-7a) + 4 \times 5 \\ &= -28a + 20 \end{aligned}$$

8

$$\begin{aligned} & (6b + 6) \times (-1) \\ &= 6b \times (-1) + 6 \times (-1) \\ &= -6b - 6 \end{aligned}$$

①

$$(-3y - 6) \times 4$$

②

$$(-7x + 9) \times 3$$

③

$$(-6b + 8) \times (-10)$$

④

$$(-2x + 6) \times 4$$

⑤

$$(-2x + 8) \times (-4)$$

⑥

$$-8(-3y + 3)$$

⑦

$$-5(8x - 10)$$

⑧

$$(-7a - 1) \times (-10)$$

1

$$\begin{aligned}(-3y - 6) \times 4 &= -3y \times 4 - 6 \times 4 \\ &= -12y - 24\end{aligned}$$

2

$$\begin{aligned}(-7x + 9) \times 3 &= -7x \times 3 + 9 \times 3 \\ &= -21x + 27\end{aligned}$$

3

$$\begin{aligned}(-6b + 8) \times (-10) \\ &= -6b \times (-10) + 8 \times (-10) \\ &= 60b - 80\end{aligned}$$

4

$$\begin{aligned}(-2x + 6) \times 4 &= -2x \times 4 + 6 \times 4 \\ &= -8x + 24\end{aligned}$$

5

$$\begin{aligned}(-2x + 8) \times (-4) \\ &= -2x \times (-4) + 8 \times (-4) \\ &= 8x - 32\end{aligned}$$

6

$$\begin{aligned}-8(-3y + 3) \\ &= -8 \times (-3y) - 8 \times 3 \\ &= 24y - 24\end{aligned}$$

7

$$\begin{aligned}-5(8x - 10) \\ &= -5 \times 8x - 5 \times (-10) \\ &= -40x + 50\end{aligned}$$

8

$$\begin{aligned}(-7a - 1) \times (-10) \\ &= -7a \times (-10) - 1 \times (-10) \\ &= 70a + 10\end{aligned}$$

1

$$8(-3a + 2)$$

2

$$(-2y + 6) \times (-8)$$

3

$$(10b + 2) \times (-9)$$

4

$$-9(2a - 7)$$

5

$$8(7b + 6)$$

6

$$8(-9a + 9)$$

7

$$9(8y - 2)$$

8

$$6(-5b + 7)$$

1

$$\begin{aligned}8(-3a + 2) &= 8 \times (-3a) + 8 \times 2 \\ &= -24a + 16\end{aligned}$$

2

$$\begin{aligned}(-2y + 6) \times (-8) \\ &= -2y \times (-8) + 6 \times (-8) \\ &= 16y - 48\end{aligned}$$

3

$$\begin{aligned}(10b + 2) \times (-9) \\ &= 10b \times (-9) + 2 \times (-9) \\ &= -90b - 18\end{aligned}$$

4

$$\begin{aligned}-9(2a - 7) &= -9 \times 2a - 9 \times (-7) \\ &= -18a + 63\end{aligned}$$

5

$$\begin{aligned}8(7b + 6) &= 8 \times 7b + 8 \times 6 \\ &= 56b + 48\end{aligned}$$

6

$$\begin{aligned}8(-9a + 9) &= 8 \times (-9a) + 8 \times 9 \\ &= -72a + 72\end{aligned}$$

7

$$\begin{aligned}9(8y - 2) &= 9 \times 8y + 9 \times (-2) \\ &= 72y - 18\end{aligned}$$

8

$$\begin{aligned}6(-5b + 7) &= 6 \times (-5b) + 6 \times 7 \\ &= -30b + 42\end{aligned}$$

1

$$2(10y + 7)$$

2

$$(-10b + 9) \times (-10)$$

3

$$-9(-9b + 9)$$

4

$$-(-2b - 9)$$

5

$$(-b + 5) \times 3$$

6

$$(9y - 3) \times (-7)$$

7

$$(-2b + 4) \times (-2)$$

8

$$4(7b - 7)$$

1

$$\begin{aligned}2(10y + 7) &= 2 \times 10y + 2 \times 7 \\ &= 20y + 14\end{aligned}$$

2

$$\begin{aligned}(-10b + 9) \times (-10) \\ &= -10b \times (-10) + 9 \times (-10) \\ &= 100b - 90\end{aligned}$$

3

$$\begin{aligned}-9(-9b + 9) \\ &= -9 \times (-9b) - 9 \times 9 \\ &= 81b - 81\end{aligned}$$

4

$$\begin{aligned}-(-2b - 9) \\ &= -1 \times (-2b) - 1 \times (-9) \\ &= 2b + 9\end{aligned}$$

5

$$\begin{aligned}(-b + 5) \times 3 &= -b \times 3 + 5 \times 3 \\ &= -3b + 15\end{aligned}$$

6

$$\begin{aligned}(9y - 3) \times (-7) \\ &= 9y \times (-7) - 3 \times (-7) \\ &= -63y + 21\end{aligned}$$

7

$$\begin{aligned}(-2b + 4) \times (-2) \\ &= -2b \times (-2) + 4 \times (-2) \\ &= 4b - 8\end{aligned}$$

8

$$\begin{aligned}4(7b - 7) &= 4 \times 7b + 4 \times (-7) \\ &= 28b - 28\end{aligned}$$

①

$$(8x - 5) \times 2$$

②

$$-4(3x + 5)$$

③

$$3(9b - 1)$$

④

$$7(-8a + 9)$$

⑤

$$4(-8x - 5)$$

⑥

$$(10y + 7) \times 10$$

⑦

$$(-24x + 36) \div (-6)$$

⑧

$$(-5b - 6) \times 4$$

1

$$\begin{aligned}(8x - 5) \times 2 &= 8x \times 2 - 5 \times 2 \\ &= 16x - 10\end{aligned}$$

2

$$\begin{aligned}-4(3x + 5) &= -4 \times 3x - 4 \times 5 \\ &= -12x - 20\end{aligned}$$

3

$$\begin{aligned}3(9b - 1) &= 3 \times 9b + 3 \times (-1) \\ &= 27b - 3\end{aligned}$$

4

$$\begin{aligned}7(-8a + 9) &= 7 \times (-8a) + 7 \times 9 \\ &= -56a + 63\end{aligned}$$

5

$$\begin{aligned}4(-8x - 5) \\ &= 4 \times (-8x) + 4 \times (-5) \\ &= -32x - 20\end{aligned}$$

6

$$\begin{aligned}(10y + 7) \times 10 \\ &= 10y \times 10 + 7 \times 10 \\ &= 100y + 70\end{aligned}$$

7

$$\begin{aligned}(-24x + 36) \div (-6) \\ &= (-24x + 36) \times \left(-\frac{1}{6}\right) \\ &= -24x \times \left(-\frac{1}{6}\right) + 36 \times \left(-\frac{1}{6}\right) \\ &= 4x - 6\end{aligned}$$

8

$$\begin{aligned}(-5b - 6) \times 4 &= -5b \times 4 - 6 \times 4 \\ &= -20b - 24\end{aligned}$$

①

$$-9(5x + 2)$$

②

$$-2(x - 10)$$

③

$$-6(-4a + 10)$$

④

$$(8x + 2) \times (-4)$$

⑤

$$(-40x + 40) \div (-8)$$

⑥

$$(-b - 6) \times 4$$

⑦

$$-5(3y + 3)$$

⑧

$$10(3x - 4)$$

1

$$\begin{aligned} -9(5x + 2) &= -9 \times 5x - 9 \times 2 \\ &= -45x - 18 \end{aligned}$$

2

$$\begin{aligned} -2(x - 10) &= -2 \times x - 2 \times (-10) \\ &= -2x + 20 \end{aligned}$$

3

$$\begin{aligned} &-6(-4a + 10) \\ &= -6 \times (-4a) - 6 \times 10 \\ &= 24a - 60 \end{aligned}$$

4

$$\begin{aligned} &(8x + 2) \times (-4) \\ &= 8x \times (-4) + 2 \times (-4) \\ &= -32x - 8 \end{aligned}$$

5

$$\begin{aligned} &(-40x + 40) \div (-8) \\ &= (-40x + 40) \times \left(-\frac{1}{8}\right) \\ &= -40x \times \left(-\frac{1}{8}\right) + 40 \times \left(-\frac{1}{8}\right) \\ &= 5x - 5 \end{aligned}$$

6

$$\begin{aligned} (-b - 6) \times 4 &= -b \times 4 - 6 \times 4 \\ &= -4b - 24 \end{aligned}$$

7

$$\begin{aligned} -5(3y + 3) &= -5 \times 3y - 5 \times 3 \\ &= -15y - 15 \end{aligned}$$

8

$$\begin{aligned} 10(3x - 4) &= 10 \times 3x + 10 \times (-4) \\ &= 30x - 40 \end{aligned}$$

①

$$(-a - 8) \times 9$$

②

$$(5a - 1) \times (-7)$$

③

$$-7(-7y - 6)$$

④

$$(7x - 3) \times (-6)$$

⑤

$$(-64x - 40) \div (-8)$$

⑥

$$(24x + 42) \div 6$$

⑦

$$(4b - 5) \times 6$$

⑧

$$(8y + 2) \times 3$$

1

$$\begin{aligned}(-a - 8) \times 9 &= -a \times 9 - 8 \times 9 \\ &= -9a - 72\end{aligned}$$

2

$$\begin{aligned}(5a - 1) \times (-7) \\ &= 5a \times (-7) - 1 \times (-7) \\ &= -35a + 7\end{aligned}$$

3

$$\begin{aligned}-7(-7y - 6) \\ &= -7 \times (-7y) - 7 \times (-6) \\ &= 49y + 42\end{aligned}$$

4

$$\begin{aligned}(7x - 3) \times (-6) \\ &= 7x \times (-6) - 3 \times (-6) \\ &= -42x + 18\end{aligned}$$

5

$$\begin{aligned}(-64x - 40) \div (-8) \\ &= (-64x - 40) \times \left(-\frac{1}{8}\right) \\ &= -64x \times \left(-\frac{1}{8}\right) - 40 \times \left(-\frac{1}{8}\right) \\ &= 8x + 5\end{aligned}$$

6

$$\begin{aligned}(24x + 42) \div 6 \\ &= (24x + 42) \times \frac{1}{6} \\ &= 24x \times \frac{1}{6} + 42 \times \frac{1}{6} \\ &= 4x + 7\end{aligned}$$

7

$$\begin{aligned}(4b - 5) \times 6 &= 4b \times 6 - 5 \times 6 \\ &= 24b - 30\end{aligned}$$

8

$$\begin{aligned}(8y + 2) \times 3 &= 8y \times 3 + 2 \times 3 \\ &= 24y + 6\end{aligned}$$

1

$$10(-2b - 9)$$

2

$$-7(-y - 3)$$

3

$$(36x - 18) \div (-9)$$

4

$$(3a + 2) \times 6$$

5

$$10(-7a + 6)$$

6

$$-3(5y + 8)$$

7

$$(6b - 2) \times (-10)$$

8

$$(-2y - 6) \times (-6)$$

1

$$\begin{aligned} & 10(-2b - 9) \\ &= 10 \times (-2b) + 10 \times (-9) \\ &= -20b - 90 \end{aligned}$$

2

$$\begin{aligned} & -7(-y - 3) \\ &= -7 \times (-y) - 7 \times (-3) \\ &= 7y + 21 \end{aligned}$$

3

$$\begin{aligned} & (36x - 18) \div (-9) \\ &= (36x - 18) \times \left(-\frac{1}{9}\right) \\ &= 36x \times \left(-\frac{1}{9}\right) - 18 \times \left(-\frac{1}{9}\right) \\ &= -4x + 2 \end{aligned}$$

4

$$\begin{aligned} (3a + 2) \times 6 &= 3a \times 6 + 2 \times 6 \\ &= 18a + 12 \end{aligned}$$

5

$$\begin{aligned} & 10(-7a + 6) \\ &= 10 \times (-7a) + 10 \times 6 \\ &= -70a + 60 \end{aligned}$$

6

$$\begin{aligned} -3(5y + 8) &= -3 \times 5y - 3 \times 8 \\ &= -15y - 24 \end{aligned}$$

7

$$\begin{aligned} & (6b - 2) \times (-10) \\ &= 6b \times (-10) - 2 \times (-10) \\ &= -60b + 20 \end{aligned}$$

8

$$\begin{aligned} & (-2y - 6) \times (-6) \\ &= -2y \times (-6) - 6 \times (-6) \\ &= 12y + 36 \end{aligned}$$

①

$$7(-6a + 5)$$

②

$$(2x + 6) \times 4$$

③

$$(18x - 18) \div 3$$

④

$$3(-3x + 2)$$

⑤

$$-5(2b - 7)$$

⑥

$$(9a + 4) \times 6$$

⑦

$$-10(3y - 2)$$

⑧

$$(6x - 1) \times 9$$

1

$$\begin{aligned}7(-6a + 5) &= 7 \times (-6a) + 7 \times 5 \\ &= -42a + 35\end{aligned}$$

2

$$\begin{aligned}(2x + 6) \times 4 &= 2x \times 4 + 6 \times 4 \\ &= 8x + 24\end{aligned}$$

3

$$\begin{aligned}(18x - 18) \div 3 \\ &= (18x - 18) \times \frac{1}{3} \\ &= 18x \times \frac{1}{3} - 18 \times \frac{1}{3} \\ &= 6x - 6\end{aligned}$$

4

$$\begin{aligned}3(-3x + 2) &= 3 \times (-3x) + 3 \times 2 \\ &= -9x + 6\end{aligned}$$

5

$$\begin{aligned}-5(2b - 7) &= -5 \times 2b - 5 \times (-7) \\ &= -10b + 35\end{aligned}$$

6

$$\begin{aligned}(9a + 4) \times 6 &= 9a \times 6 + 4 \times 6 \\ &= 54a + 24\end{aligned}$$

7

$$\begin{aligned}-10(3y - 2) \\ &= -10 \times 3y - 10 \times (-2) \\ &= -30y + 20\end{aligned}$$

8

$$\begin{aligned}(6x - 1) \times 9 &= 6x \times 9 - 1 \times 9 \\ &= 54x - 9\end{aligned}$$

①

$$8(3y - 6)$$

②

$$(-48x + 48) \div (-6)$$

③

$$(-a + 3) \times (-3)$$

④

$$(-40x - 10) \div (-5)$$

⑤

$$7(a + 7)$$

⑥

$$(-10y - 6) \times (-6)$$

⑦

$$10(-9y - 10)$$

⑧

$$(y + 5) \times (-4)$$

1

$$\begin{aligned} 8(3y - 6) &= 8 \times 3y + 8 \times (-6) \\ &= 24y - 48 \end{aligned}$$

2

$$\begin{aligned} &(-48x + 48) \div (-6) \\ &= (-48x + 48) \times \left(-\frac{1}{6}\right) \\ &= -48x \times \left(-\frac{1}{6}\right) + 48 \times \left(-\frac{1}{6}\right) \\ &= 8x - 8 \end{aligned}$$

3

$$\begin{aligned} &(-a + 3) \times (-3) \\ &= -a \times (-3) + 3 \times (-3) \\ &= 3a - 9 \end{aligned}$$

4

$$\begin{aligned} &(-40x - 10) \div (-5) \\ &= (-40x - 10) \times \left(-\frac{1}{5}\right) \\ &= -40x \times \left(-\frac{1}{5}\right) - 10 \times \left(-\frac{1}{5}\right) \\ &= 8x + 2 \end{aligned}$$

5

$$\begin{aligned} 7(a + 7) &= 7 \times a + 7 \times 7 \\ &= 7a + 49 \end{aligned}$$

6

$$\begin{aligned} &(-10y - 6) \times (-6) \\ &= -10y \times (-6) - 6 \times (-6) \\ &= 60y + 36 \end{aligned}$$

7

$$\begin{aligned} &10(-9y - 10) \\ &= 10 \times (-9y) + 10 \times (-10) \\ &= -90y - 100 \end{aligned}$$

8

$$\begin{aligned} &(y + 5) \times (-4) \\ &= y \times (-4) + 5 \times (-4) \\ &= -4y - 20 \end{aligned}$$

①

$$3(x - 5)$$

②

$$(-5x - 9) \times 3$$

③

$$(-3b - 10) \times (-5)$$

④

$$-10(-7y + 4)$$

⑤

$$(3y - 9) \times 7$$

⑥

$$(2b + 3) \times (-7)$$

⑦

$$2(-3y - 6)$$

⑧

$$(45x - 45) \div (-9)$$

1

$$\begin{aligned} 3(x - 5) &= 3 \times x + 3 \times (-5) \\ &= 3x - 15 \end{aligned}$$

2

$$\begin{aligned} (-5x - 9) \times 3 &= -5x \times 3 - 9 \times 3 \\ &= -15x - 27 \end{aligned}$$

3

$$\begin{aligned} (-3b - 10) \times (-5) \\ &= -3b \times (-5) - 10 \times (-5) \\ &= 15b + 50 \end{aligned}$$

4

$$\begin{aligned} -10(-7y + 4) \\ &= -10 \times (-7y) - 10 \times 4 \\ &= 70y - 40 \end{aligned}$$

5

$$\begin{aligned} (3y - 9) \times 7 &= 3y \times 7 - 9 \times 7 \\ &= 21y - 63 \end{aligned}$$

6

$$\begin{aligned} (2b + 3) \times (-7) \\ &= 2b \times (-7) + 3 \times (-7) \\ &= -14b - 21 \end{aligned}$$

7

$$\begin{aligned} 2(-3y - 6) \\ &= 2 \times (-3y) + 2 \times (-6) \\ &= -6y - 12 \end{aligned}$$

8

$$\begin{aligned} (45x - 45) \div (-9) \\ &= (45x - 45) \times \left(-\frac{1}{9}\right) \\ &= 45x \times \left(-\frac{1}{9}\right) - 45 \times \left(-\frac{1}{9}\right) \\ &= -5x + 5 \end{aligned}$$

問題

次の計算をしましょう。

1

$$-(4a - 1) - 5(-a + 2)$$

2

$$4a + 9(2a - 6)$$

3

$$7(5x + 10) + 4(5x - 9)$$

4

$$2a - 6(-3a + 8)$$

5

$$-5(-9a - 2) + a$$

6

$$7x + 5(-6x - 1)$$

7

$$5(6x + 10) - 9(-10x + 1)$$

8

$$4(6x - 6) + 10(-10x + 3)$$

9

$$-7a + 6(9a + 7)$$

10

$$9a + 2(-5a - 6)$$

1

$$\begin{aligned}
 & -(4a - 1) - 5(-a + 2) \\
 &= -4a + 1 + 5a - 10 \\
 &= -4a + 5a + 1 - 10 \\
 &= a - 9
 \end{aligned}$$

2

$$\begin{aligned}
 4a + 9(2a - 6) &= 4a + 18a - 54 \\
 &= 22a - 54
 \end{aligned}$$

3

$$\begin{aligned}
 7(5x + 10) + 4(5x - 9) \\
 &= 35x + 70 + 20x - 36 \\
 &= 35x + 20x + 70 - 36 \\
 &= 55x + 34
 \end{aligned}$$

4

$$\begin{aligned}
 2a - 6(-3a + 8) &= 2a + 18a - 48 \\
 &= 20a - 48
 \end{aligned}$$

5

$$\begin{aligned}
 -5(-9a - 2) + a &= 45a + 10 + a \\
 &= 45a + a + 10 \\
 &= 46a + 10
 \end{aligned}$$

6

$$\begin{aligned}
 7x + 5(-6x - 1) &= 7x - 30x - 5 \\
 &= -23x - 5
 \end{aligned}$$

7

$$\begin{aligned}
 5(6x + 10) - 9(-10x + 1) \\
 &= 30x + 50 + 90x - 9 \\
 &= 30x + 90x + 50 - 9 \\
 &= 120x + 41
 \end{aligned}$$

8

$$\begin{aligned}
 4(6x - 6) + 10(-10x + 3) \\
 &= 24x - 24 - 100x + 30 \\
 &= 24x - 100x - 24 + 30 \\
 &= -76x + 6
 \end{aligned}$$

9

$$\begin{aligned}
 -7a + 6(9a + 7) \\
 &= -7a + 54a + 42 \\
 &= 47a + 42
 \end{aligned}$$

10

$$\begin{aligned}
 9a + 2(-5a - 6) &= 9a - 10a - 12 \\
 &= -a - 12
 \end{aligned}$$

1

$$-6(-5a - 5) - 9(8a - 9)$$

2

$$-4(6a - 6) - 10a$$

3

$$-7(10a + 9) - 3(5a + 6)$$

4

$$4(-3x - 10) + 4(10x + 9)$$

5

$$6(-2x + 10) - 10x$$

6

$$5x - 10(-2x + 9)$$

7

$$-6(9x - 5) - 4(7x - 8)$$

8

$$7(-2a + 9) - 2a$$

9

$$-a + 7(6a - 1)$$

10

$$-2x + 3(4x + 4)$$

1

$$\begin{aligned}
 & -6(-5a - 5) - 9(8a - 9) \\
 & = 30a + 30 - 72a + 81 \\
 & = 30a - 72a + 30 + 81 \\
 & = -42a + 111
 \end{aligned}$$

2

$$\begin{aligned}
 & -4(6a - 6) - 10a \\
 & = -24a + 24 - 10a \\
 & = -24a - 10a + 24 \\
 & = -34a + 24
 \end{aligned}$$

3

$$\begin{aligned}
 & -7(10a + 9) - 3(5a + 6) \\
 & = -70a - 63 - 15a - 18 \\
 & = -70a - 15a - 63 - 18 \\
 & = -85a - 81
 \end{aligned}$$

4

$$\begin{aligned}
 & 4(-3x - 10) + 4(10x + 9) \\
 & = -12x - 40 + 40x + 36 \\
 & = -12x + 40x - 40 + 36 \\
 & = 28x - 4
 \end{aligned}$$

5

$$\begin{aligned}
 & 6(-2x + 10) - 10x \\
 & = -12x + 60 - 10x \\
 & = -12x - 10x + 60 \\
 & = -22x + 60
 \end{aligned}$$

6

$$\begin{aligned}
 5x - 10(-2x + 9) & = 5x + 20x - 90 \\
 & = 25x - 90
 \end{aligned}$$

7

$$\begin{aligned}
 & -6(9x - 5) - 4(7x - 8) \\
 & = -54x + 30 - 28x + 32 \\
 & = -54x - 28x + 30 + 32 \\
 & = -82x + 62
 \end{aligned}$$

8

$$\begin{aligned}
 & 7(-2a + 9) - 2a \\
 & = -14a + 63 - 2a \\
 & = -14a - 2a + 63 \\
 & = -16a + 63
 \end{aligned}$$

9

$$\begin{aligned}
 -a + 7(6a - 1) & = -a + 42a - 7 \\
 & = 41a - 7
 \end{aligned}$$

10

$$\begin{aligned}
 & -2x + 3(4x + 4) \\
 & = -2x + 12x + 12 \\
 & = 10x + 12
 \end{aligned}$$

1

$$-2(-7x - 4) - 10x$$

2

$$-2(6x - 8) + 5(8x - 9)$$

3

$$-(-x + 4) - 7x$$

4

$$-(-9a + 6) + 3a$$

5

$$5(-4x + 6) + 2(-9x - 7)$$

6

$$2(-7a - 9) + 8a$$

7

$$-8(3a - 10) + 9(-3a - 6)$$

8

$$5(-7x - 1) + 6x$$

9

$$6x - 5(8x + 1)$$

10

$$7(5a - 2) + a$$

1

$$\begin{aligned}
 & -2(-7x - 4) - 10x \\
 & = 14x + 8 - 10x \\
 & = 14x - 10x + 8 \\
 & = 4x + 8
 \end{aligned}$$

2

$$\begin{aligned}
 & -2(6x - 8) + 5(8x - 9) \\
 & = -12x + 16 + 40x - 45 \\
 & = -12x + 40x + 16 - 45 \\
 & = 28x - 29
 \end{aligned}$$

3

$$\begin{aligned}
 -(-x + 4) - 7x & = x - 4 - 7x \\
 & = x - 7x - 4 \\
 & = -6x - 4
 \end{aligned}$$

4

$$\begin{aligned}
 -(-9a + 6) + 3a & = 9a - 6 + 3a \\
 & = 9a + 3a - 6 \\
 & = 12a - 6
 \end{aligned}$$

5

$$\begin{aligned}
 & 5(-4x + 6) + 2(-9x - 7) \\
 & = -20x + 30 - 18x - 14 \\
 & = -20x - 18x + 30 - 14 \\
 & = -38x + 16
 \end{aligned}$$

6

$$\begin{aligned}
 & 2(-7a - 9) + 8a \\
 & = -14a - 18 + 8a \\
 & = -14a + 8a - 18 \\
 & = -6a - 18
 \end{aligned}$$

7

$$\begin{aligned}
 & -8(3a - 10) + 9(-3a - 6) \\
 & = -24a + 80 - 27a - 54 \\
 & = -24a - 27a + 80 - 54 \\
 & = -51a + 26
 \end{aligned}$$

8

$$\begin{aligned}
 5(-7x - 1) + 6x & = -35x - 5 + 6x \\
 & = -35x + 6x - 5 \\
 & = -29x - 5
 \end{aligned}$$

9

$$\begin{aligned}
 6x - 5(8x + 1) & = 6x - 40x - 5 \\
 & = -34x - 5
 \end{aligned}$$

10

$$\begin{aligned}
 7(5a - 2) + a & = 35a - 14 + a \\
 & = 35a + a - 14 \\
 & = 36a - 14
 \end{aligned}$$

1

$$-(-2x + 10) - 8x$$

2

$$-6a - 8(10a - 6)$$

3

$$-3(-2x + 4) - 10(4x + 3)$$

4

$$-3(4x - 10) - 8x$$

5

$$-6(10a - 2) + 9a$$

6

$$10(10a + 5) - 10a$$

7

$$6(-9x + 3) - 2x$$

8

$$3a - 5(-10a - 1)$$

9

$$9(9x - 1) + 5(-10x + 10)$$

10

$$-(-4x - 1) + 5(x + 2)$$

1

$$\begin{aligned}
 -(-2x + 10) - 8x &= 2x - 10 - 8x \\
 &= 2x - 8x - 10 \\
 &= -6x - 10
 \end{aligned}$$

2

$$\begin{aligned}
 -6a - 8(10a - 6) & \\
 &= -6a - 80a + 48 \\
 &= -86a + 48
 \end{aligned}$$

3

$$\begin{aligned}
 -3(-2x + 4) - 10(4x + 3) & \\
 &= 6x - 12 - 40x - 30 \\
 &= 6x - 40x - 12 - 30 \\
 &= -34x - 42
 \end{aligned}$$

4

$$\begin{aligned}
 -3(4x - 10) - 8x & \\
 &= -12x + 30 - 8x \\
 &= -12x - 8x + 30 \\
 &= -20x + 30
 \end{aligned}$$

5

$$\begin{aligned}
 -6(10a - 2) + 9a & \\
 &= -60a + 12 + 9a \\
 &= -60a + 9a + 12 \\
 &= -51a + 12
 \end{aligned}$$

6

$$\begin{aligned}
 10(10a + 5) - 10a & \\
 &= 100a + 50 - 10a \\
 &= 100a - 10a + 50 \\
 &= 90a + 50
 \end{aligned}$$

7

$$\begin{aligned}
 6(-9x + 3) - 2x & \\
 &= -54x + 18 - 2x \\
 &= -54x - 2x + 18 \\
 &= -56x + 18
 \end{aligned}$$

8

$$\begin{aligned}
 3a - 5(-10a - 1) &= 3a + 50a + 5 \\
 &= 53a + 5
 \end{aligned}$$

9

$$\begin{aligned}
 9(9x - 1) + 5(-10x + 10) & \\
 &= 81x - 9 - 50x + 50 \\
 &= 81x - 50x - 9 + 50 \\
 &= 31x + 41
 \end{aligned}$$

10

$$\begin{aligned}
 -(-4x - 1) + 5(x + 2) & \\
 &= 4x + 1 + 5x + 10 \\
 &= 4x + 5x + 1 + 10 \\
 &= 9x + 11
 \end{aligned}$$

1

$$-5(-7x - 7) + 7(-10x - 7)$$

2

$$-4(x - 6) + 9(-9x + 2)$$

3

$$-4x + 2(-10x + 3)$$

4

$$-9(-5a + 8) - 2a$$

5

$$-9(9a + 1) - 5(10a - 10)$$

6

$$8a - 9(-7a - 7)$$

7

$$6(-9a - 3) - 2a$$

8

$$-5a + 6(10a - 9)$$

9

$$-9(8a - 7) + 7a$$

10

$$-7a + 9(10a + 3)$$

1

$$\begin{aligned}
& -5(-7x - 7) + 7(-10x - 7) \\
& = 35x + 35 - 70x - 49 \\
& = 35x - 70x + 35 - 49 \\
& = -35x - 14
\end{aligned}$$

2

$$\begin{aligned}
& -4(x - 6) + 9(-9x + 2) \\
& = -4x + 24 - 81x + 18 \\
& = -4x - 81x + 24 + 18 \\
& = -85x + 42
\end{aligned}$$

3

$$\begin{aligned}
& -4x + 2(-10x + 3) \\
& = -4x - 20x + 6 \\
& = -24x + 6
\end{aligned}$$

4

$$\begin{aligned}
& -9(-5a + 8) - 2a \\
& = 45a - 72 - 2a \\
& = 45a - 2a - 72 \\
& = 43a - 72
\end{aligned}$$

5

$$\begin{aligned}
& -9(9a + 1) - 5(10a - 10) \\
& = -81a - 9 - 50a + 50 \\
& = -81a - 50a - 9 + 50 \\
& = -131a + 41
\end{aligned}$$

6

$$\begin{aligned}
8a - 9(-7a - 7) & = 8a + 63a + 63 \\
& = 71a + 63
\end{aligned}$$

7

$$\begin{aligned}
& 6(-9a - 3) - 2a \\
& = -54a - 18 - 2a \\
& = -54a - 2a - 18 \\
& = -56a - 18
\end{aligned}$$

8

$$\begin{aligned}
& -5a + 6(10a - 9) \\
& = -5a + 60a - 54 \\
& = 55a - 54
\end{aligned}$$

9

$$\begin{aligned}
& -9(8a - 7) + 7a \\
& = -72a + 63 + 7a \\
& = -72a + 7a + 63 \\
& = -65a + 63
\end{aligned}$$

10

$$\begin{aligned}
& -7a + 9(10a + 3) \\
& = -7a + 90a + 27 \\
& = 83a + 27
\end{aligned}$$

1

$$6a - 5(10a - 10)$$

2

$$-10(-8x - 6) - 5(3x + 9)$$

3

$$6(5x + 5) + 8x$$

4

$$-7x + 2(9x + 9)$$

5

$$-9a - 6(2a + 3)$$

6

$$x - 4(-9x + 6)$$

7

$$-7x - 2(9x + 9)$$

8

$$-3(7a - 7) - 9(-9a + 2)$$

9

$$6x + 4(2x - 1)$$

10

$$3x + 5(3x + 5)$$

1

$$\begin{aligned}6a - 5(10a - 10) &= 6a - 50a + 50 \\ &= -44a + 50\end{aligned}$$

2

$$\begin{aligned}-10(-8x - 6) - 5(3x + 9) &= 80x + 60 - 15x - 45 \\ &= 80x - 15x + 60 - 45 \\ &= 65x + 15\end{aligned}$$

3

$$\begin{aligned}6(5x + 5) + 8x &= 30x + 30 + 8x \\ &= 30x + 8x + 30 \\ &= 38x + 30\end{aligned}$$

4

$$\begin{aligned}-7x + 2(9x + 9) &= -7x + 18x + 18 \\ &= 11x + 18\end{aligned}$$

5

$$\begin{aligned}-9a - 6(2a + 3) &= -9a - 12a - 18 \\ &= -21a - 18\end{aligned}$$

6

$$\begin{aligned}x - 4(-9x + 6) &= x + 36x - 24 \\ &= 37x - 24\end{aligned}$$

7

$$\begin{aligned}-7x - 2(9x + 9) &= -7x - 18x - 18 \\ &= -25x - 18\end{aligned}$$

8

$$\begin{aligned}-3(7a - 7) - 9(-9a + 2) &= -21a + 21 + 81a - 18 \\ &= -21a + 81a + 21 - 18 \\ &= 60a + 3\end{aligned}$$

9

$$\begin{aligned}6x + 4(2x - 1) &= 6x + 8x - 4 \\ &= 14x - 4\end{aligned}$$

10

$$\begin{aligned}3x + 5(3x + 5) &= 3x + 15x + 25 \\ &= 18x + 25\end{aligned}$$

1

$$-8(6x - 6) + 10x$$

2

$$-4(-4a + 1) - 6(8a - 8)$$

3

$$-(-10x - 4) - 5x$$

4

$$5x + 8(4x - 4)$$

5

$$-6(-6a + 2) - 2(2a - 10)$$

6

$$9(-9x + 1) + 5(10x - 10)$$

7

$$2(-6x + 1) + 3x$$

8

$$-4(9x + 9) + x$$

9

$$6(-9a + 5) + 4(7a + 8)$$

10

$$2x + 7(6x - 4)$$

1

$$\begin{aligned}
 & -8(6x - 6) + 10x \\
 & = -48x + 48 + 10x \\
 & = -48x + 10x + 48 \\
 & = -38x + 48
 \end{aligned}$$

2

$$\begin{aligned}
 & -4(-4a + 1) - 6(8a - 8) \\
 & = 16a - 4 - 48a + 48 \\
 & = 16a - 48a - 4 + 48 \\
 & = -32a + 44
 \end{aligned}$$

3

$$\begin{aligned}
 -(-10x - 4) - 5x & = 10x + 4 - 5x \\
 & = 10x - 5x + 4 \\
 & = 5x + 4
 \end{aligned}$$

4

$$\begin{aligned}
 5x + 8(4x - 4) & = 5x + 32x - 32 \\
 & = 37x - 32
 \end{aligned}$$

5

$$\begin{aligned}
 & -6(-6a + 2) - 2(2a - 10) \\
 & = 36a - 12 - 4a + 20 \\
 & = 36a - 4a - 12 + 20 \\
 & = 32a + 8
 \end{aligned}$$

6

$$\begin{aligned}
 & 9(-9x + 1) + 5(10x - 10) \\
 & = -81x + 9 + 50x - 50 \\
 & = -81x + 50x + 9 - 50 \\
 & = -31x - 41
 \end{aligned}$$

7

$$\begin{aligned}
 2(-6x + 1) + 3x & = -12x + 2 + 3x \\
 & = -12x + 3x + 2 \\
 & = -9x + 2
 \end{aligned}$$

8

$$\begin{aligned}
 -4(9x + 9) + x & = -36x - 36 + x \\
 & = -36x + x - 36 \\
 & = -35x - 36
 \end{aligned}$$

9

$$\begin{aligned}
 & 6(-9a + 5) + 4(7a + 8) \\
 & = -54a + 30 + 28a + 32 \\
 & = -54a + 28a + 30 + 32 \\
 & = -26a + 62
 \end{aligned}$$

10

$$\begin{aligned}
 2x + 7(6x - 4) & = 2x + 42x - 28 \\
 & = 44x - 28
 \end{aligned}$$

1

$$2(6x - 1) - 3x$$

2

$$-a - 4(10a + 5)$$

3

$$-8(8x - 5) - 7(9x + 4)$$

4

$$8a + 4(10a - 2)$$

5

$$2x + 6(-3x + 8)$$

6

$$-4a + 2(7a - 7)$$

7

$$-10a - 9(-7a + 6)$$

8

$$3(5x + 7) - 4(10x + 6)$$

9

$$-7a - 5(3a + 8)$$

10

$$5(-10x + 2) + 10x$$

1

$$\begin{aligned} 2(6x - 1) - 3x &= 12x - 2 - 3x \\ &= 12x - 3x - 2 \\ &= 9x - 2 \end{aligned}$$

2

$$\begin{aligned} -a - 4(10a + 5) &= -a - 40a - 20 \\ &= -41a - 20 \end{aligned}$$

3

$$\begin{aligned} -8(8x - 5) - 7(9x + 4) \\ &= -64x + 40 - 63x - 28 \\ &= -64x - 63x + 40 - 28 \\ &= -127x + 12 \end{aligned}$$

4

$$\begin{aligned} 8a + 4(10a - 2) &= 8a + 40a - 8 \\ &= 48a - 8 \end{aligned}$$

5

$$\begin{aligned} 2x + 6(-3x + 8) &= 2x - 18x + 48 \\ &= -16x + 48 \end{aligned}$$

6

$$\begin{aligned} -4a + 2(7a - 7) \\ &= -4a + 14a - 14 \\ &= 10a - 14 \end{aligned}$$

7

$$\begin{aligned} -10a - 9(-7a + 6) \\ &= -10a + 63a - 54 \\ &= 53a - 54 \end{aligned}$$

8

$$\begin{aligned} 3(5x + 7) - 4(10x + 6) \\ &= 15x + 21 - 40x - 24 \\ &= 15x - 40x + 21 - 24 \\ &= -25x - 3 \end{aligned}$$

9

$$\begin{aligned} -7a - 5(3a + 8) \\ &= -7a - 15a - 40 \\ &= -22a - 40 \end{aligned}$$

10

$$\begin{aligned} 5(-10x + 2) + 10x \\ &= -50x + 10 + 10x \\ &= -50x + 10x + 10 \\ &= -40x + 10 \end{aligned}$$

1

$$-6(a + 9) + 9a$$

2

$$6(7a - 7) + 4(-9a + 2)$$

3

$$-5(-8a - 9) - 10(-4a - 2)$$

4

$$-10(10x + 5) + 10x$$

5

$$-4(-6a + 1) - 6(2a - 4)$$

6

$$10(-8a + 6) + 3a$$

7

$$-6(x + 2) + 9x$$

8

$$-7a + 5(8a + 2)$$

9

$$8a - 2(-8a + 5)$$

10

$$-5x + 6(9x - 9)$$

1

$$\begin{aligned}
 -6(a+9)+9a &= -6a-54+9a \\
 &= -6a+9a-54 \\
 &= 3a-54
 \end{aligned}$$

2

$$\begin{aligned}
 6(7a-7)+4(-9a+2) &= 42a-42-36a+8 \\
 &= 42a-36a-42+8 \\
 &= 6a-34
 \end{aligned}$$

3

$$\begin{aligned}
 -5(-8a-9)-10(-4a-2) &= 40a+45+40a+20 \\
 &= 40a+40a+45+20 \\
 &= 80a+65
 \end{aligned}$$

4

$$\begin{aligned}
 -10(10x+5)+10x &= -100x-50+10x \\
 &= -100x+10x-50 \\
 &= -90x-50
 \end{aligned}$$

5

$$\begin{aligned}
 -4(-6a+1)-6(2a-4) &= 24a-4-12a+24 \\
 &= 24a-12a-4+24 \\
 &= 12a+20
 \end{aligned}$$

6

$$\begin{aligned}
 10(-8a+6)+3a &= -80a+60+3a \\
 &= -80a+3a+60 \\
 &= -77a+60
 \end{aligned}$$

7

$$\begin{aligned}
 -6(x+2)+9x &= -6x-12+9x \\
 &= -6x+9x-12 \\
 &= 3x-12
 \end{aligned}$$

8

$$\begin{aligned}
 -7a+5(8a+2) &= -7a+40a+10 \\
 &= 33a+10
 \end{aligned}$$

9

$$\begin{aligned}
 8a-2(-8a+5) &= 8a+16a-10 \\
 &= 24a-10
 \end{aligned}$$

10

$$\begin{aligned}
 -5x+6(9x-9) &= -5x+54x-54 \\
 &= 49x-54
 \end{aligned}$$

1

$$-4a + 3(8a - 10)$$

2

$$8(-3x + 10) - 3x$$

3

$$-3(-2a - 3) + 3(7a - 2)$$

4

$$8(-5x - 4) + 4x$$

5

$$-(7a + 2) - 3(a + 6)$$

6

$$3x - (-6x + 10)$$

7

$$-5(-5x + 9) - 9x$$

8

$$-7(3a + 7) + 3a$$

9

$$-5(5a - 9) - 9a$$

10

$$x + 6(-9x - 9)$$

1

$$\begin{aligned}
 & -4a + 3(8a - 10) \\
 &= -4a + 24a - 30 \\
 &= 20a - 30
 \end{aligned}$$

2

$$\begin{aligned}
 & 8(-3x + 10) - 3x \\
 &= -24x + 80 - 3x \\
 &= -24x - 3x + 80 \\
 &= -27x + 80
 \end{aligned}$$

3

$$\begin{aligned}
 & -3(-2a - 3) + 3(7a - 2) \\
 &= 6a + 9 + 21a - 6 \\
 &= 6a + 21a + 9 - 6 \\
 &= 27a + 3
 \end{aligned}$$

4

$$\begin{aligned}
 & 8(-5x - 4) + 4x \\
 &= -40x - 32 + 4x \\
 &= -40x + 4x - 32 \\
 &= -36x - 32
 \end{aligned}$$

5

$$\begin{aligned}
 & -(7a + 2) - 3(a + 6) \\
 &= -7a - 2 - 3a - 18 \\
 &= -7a - 3a - 2 - 18 \\
 &= -10a - 20
 \end{aligned}$$

6

$$\begin{aligned}
 3x - (-6x + 10) &= 3x + 6x - 10 \\
 &= 9x - 10
 \end{aligned}$$

7

$$\begin{aligned}
 & -5(-5x + 9) - 9x \\
 &= 25x - 45 - 9x \\
 &= 25x - 9x - 45 \\
 &= 16x - 45
 \end{aligned}$$

8

$$\begin{aligned}
 & -7(3a + 7) + 3a \\
 &= -21a - 49 + 3a \\
 &= -21a + 3a - 49 \\
 &= -18a - 49
 \end{aligned}$$

9

$$\begin{aligned}
 & -5(5a - 9) - 9a \\
 &= -25a + 45 - 9a \\
 &= -25a - 9a + 45 \\
 &= -34a + 45
 \end{aligned}$$

10

$$\begin{aligned}
 x + 6(-9x - 9) &= x - 54x - 54 \\
 &= -53x - 54
 \end{aligned}$$

1

$$-5(-4x - 2) - 7(5x + 8)$$

2

$$5(-7a + 7) + 10a$$

3

$$7a + 2(9a - 9)$$

4

$$-2(8x + 5) - 5(8x + 4)$$

5

$$-7(10a + 9) - 3(5a - 6)$$

6

$$2a + 6(-3a + 8)$$

7

$$-5(-7x - 2) + 8x$$

8

$$4(a + 6) + 9a$$

9

$$6a + 8(-10a + 6)$$

10

$$-6(10a + 2) + 9a$$

1

$$\begin{aligned}
 & -5(-4x - 2) - 7(5x + 8) \\
 & = 20x + 10 - 35x - 56 \\
 & = 20x - 35x + 10 - 56 \\
 & = -15x - 46
 \end{aligned}$$

2

$$\begin{aligned}
 & 5(-7a + 7) + 10a \\
 & = -35a + 35 + 10a \\
 & = -35a + 10a + 35 \\
 & = -25a + 35
 \end{aligned}$$

3

$$\begin{aligned}
 7a + 2(9a - 9) & = 7a + 18a - 18 \\
 & = 25a - 18
 \end{aligned}$$

4

$$\begin{aligned}
 & -2(8x + 5) - 5(8x + 4) \\
 & = -16x - 10 - 40x - 20 \\
 & = -16x - 40x - 10 - 20 \\
 & = -56x - 30
 \end{aligned}$$

5

$$\begin{aligned}
 & -7(10a + 9) - 3(5a - 6) \\
 & = -70a - 63 - 15a + 18 \\
 & = -70a - 15a - 63 + 18 \\
 & = -85a - 45
 \end{aligned}$$

6

$$\begin{aligned}
 2a + 6(-3a + 8) & = 2a - 18a + 48 \\
 & = -16a + 48
 \end{aligned}$$

7

$$\begin{aligned}
 & -5(-7x - 2) + 8x \\
 & = 35x + 10 + 8x \\
 & = 35x + 8x + 10 \\
 & = 43x + 10
 \end{aligned}$$

8

$$\begin{aligned}
 4(a + 6) + 9a & = 4a + 24 + 9a \\
 & = 4a + 9a + 24 \\
 & = 13a + 24
 \end{aligned}$$

9

$$\begin{aligned}
 6a + 8(-10a + 6) & = 6a - 80a + 48 \\
 & = -74a + 48
 \end{aligned}$$

10

$$\begin{aligned}
 & -6(10a + 2) + 9a \\
 & = -60a - 12 + 9a \\
 & = -60a + 9a - 12 \\
 & = -51a - 12
 \end{aligned}$$

1

$$4x - 4(-8x - 1)$$

2

$$-4(6a - 6) - 10(10a + 3)$$

3

$$-4a + 2(10a + 3)$$

4

$$8(5a + 6) + 7a$$

5

$$5(-7x - 2) + 8x$$

6

$$9x + 3(10x + 10)$$

7

$$-2(4x - 7) + 7x$$

8

$$-9(-5a + 7) + 6(-8a + 3)$$

9

$$10x + 7(-2x + 4)$$

10

$$9(5a - 10) + 7a$$

1

$$\begin{aligned}4x - 4(-8x - 1) &= 4x + 32x + 4 \\ &= 36x + 4\end{aligned}$$

2

$$\begin{aligned}-4(6a - 6) - 10(10a + 3) \\ &= -24a + 24 - 100a - 30 \\ &= -24a - 100a + 24 - 30 \\ &= -124a - 6\end{aligned}$$

3

$$\begin{aligned}-4a + 2(10a + 3) \\ &= -4a + 20a + 6 \\ &= 16a + 6\end{aligned}$$

4

$$\begin{aligned}8(5a + 6) + 7a &= 40a + 48 + 7a \\ &= 40a + 7a + 48 \\ &= 47a + 48\end{aligned}$$

5

$$\begin{aligned}5(-7x - 2) + 8x \\ &= -35x - 10 + 8x \\ &= -35x + 8x - 10 \\ &= -27x - 10\end{aligned}$$

6

$$\begin{aligned}9x + 3(10x + 10) &= 9x + 30x + 30 \\ &= 39x + 30\end{aligned}$$

7

$$\begin{aligned}-2(4x - 7) + 7x &= -8x + 14 + 7x \\ &= -8x + 7x + 14 \\ &= -x + 14\end{aligned}$$

8

$$\begin{aligned}-9(-5a + 7) + 6(-8a + 3) \\ &= 45a - 63 - 48a + 18 \\ &= 45a - 48a - 63 + 18 \\ &= -3a - 45\end{aligned}$$

9

$$\begin{aligned}10x + 7(-2x + 4) \\ &= 10x - 14x + 28 \\ &= -4x + 28\end{aligned}$$

10

$$\begin{aligned}9(5a - 10) + 7a &= 45a - 90 + 7a \\ &= 45a + 7a - 90 \\ &= 52a - 90\end{aligned}$$

1

$$7x + 3(9x - 7)$$

2

$$9(4a + 6) - 5(2a - 8)$$

3

$$-8x - 2(-8x - 5)$$

4

$$-3(-5a + 7) - 10a$$

5

$$5a + 3(10a - 1)$$

6

$$x - 7(-10x + 5)$$

7

$$9(5x + 10) - 7x$$

8

$$-2(-4x - 6) - 8x$$

9

$$9(5x - 10) - 7x$$

10

$$-6(-2a + 10) - 4a$$

1

$$\begin{aligned}7x + 3(9x - 7) &= 7x + 27x - 21 \\ &= 34x - 21\end{aligned}$$

2

$$\begin{aligned}9(4a + 6) - 5(2a - 8) &= 36a + 54 - 10a + 40 \\ &= 36a - 10a + 54 + 40 \\ &= 26a + 94\end{aligned}$$

3

$$\begin{aligned}-8x - 2(-8x - 5) &= -8x + 16x + 10 \\ &= 8x + 10\end{aligned}$$

4

$$\begin{aligned}-3(-5a + 7) - 10a &= 15a - 21 - 10a \\ &= 15a - 10a - 21 \\ &= 5a - 21\end{aligned}$$

5

$$\begin{aligned}5a + 3(10a - 1) &= 5a + 30a - 3 \\ &= 35a - 3\end{aligned}$$

6

$$\begin{aligned}x - 7(-10x + 5) &= x + 70x - 35 \\ &= 71x - 35\end{aligned}$$

7

$$\begin{aligned}9(5x + 10) - 7x &= 45x + 90 - 7x \\ &= 45x - 7x + 90 \\ &= 38x + 90\end{aligned}$$

8

$$\begin{aligned}-2(-4x - 6) - 8x &= 8x + 12 - 8x \\ &= 8x - 8x + 12 \\ &= 12\end{aligned}$$

9

$$\begin{aligned}9(5x - 10) - 7x &= 45x - 90 - 7x \\ &= 45x - 7x - 90 \\ &= 38x - 90\end{aligned}$$

10

$$\begin{aligned}-6(-2a + 10) - 4a &= 12a - 60 - 4a \\ &= 12a - 4a - 60 \\ &= 8a - 60\end{aligned}$$

1

$$-9(-4a + 9) + 8a$$

2

$$-2(-4a - 3) - 10a$$

3

$$-2a + 9(6a - 7)$$

4

$$-2(4x + 7) + 7x$$

5

$$3(-9x + 10) + 10x$$

6

$$3a + 8(-9a - 5)$$

7

$$-4(-3x - 10) - 4(10x - 9)$$

8

$$-3(-8a - 7) - 9(-3a + 1)$$

9

$$-3(-2x - 1) - 8x$$

10

$$9(10a - 6) + 8(7a - 1)$$

1

$$\begin{aligned}
 & -9(-4a + 9) + 8a \\
 & = 36a - 81 + 8a \\
 & = 36a + 8a - 81 \\
 & = 44a - 81
 \end{aligned}$$

2

$$\begin{aligned}
 & -2(-4a - 3) - 10a \\
 & = 8a + 6 - 10a \\
 & = 8a - 10a + 6 \\
 & = -2a + 6
 \end{aligned}$$

3

$$\begin{aligned}
 & -2a + 9(6a - 7) \\
 & = -2a + 54a - 63 \\
 & = 52a - 63
 \end{aligned}$$

4

$$\begin{aligned}
 -2(4x + 7) + 7x & = -8x - 14 + 7x \\
 & = -8x + 7x - 14 \\
 & = -x - 14
 \end{aligned}$$

5

$$\begin{aligned}
 & 3(-9x + 10) + 10x \\
 & = -27x + 30 + 10x \\
 & = -27x + 10x + 30 \\
 & = -17x + 30
 \end{aligned}$$

6

$$\begin{aligned}
 3a + 8(-9a - 5) & = 3a - 72a - 40 \\
 & = -69a - 40
 \end{aligned}$$

7

$$\begin{aligned}
 & -4(-3x - 10) - 4(10x - 9) \\
 & = 12x + 40 - 40x + 36 \\
 & = 12x - 40x + 40 + 36 \\
 & = -28x + 76
 \end{aligned}$$

8

$$\begin{aligned}
 & -3(-8a - 7) - 9(-3a + 1) \\
 & = 24a + 21 + 27a - 9 \\
 & = 24a + 27a + 21 - 9 \\
 & = 51a + 12
 \end{aligned}$$

9

$$\begin{aligned}
 -3(-2x - 1) - 8x & = 6x + 3 - 8x \\
 & = 6x - 8x + 3 \\
 & = -2x + 3
 \end{aligned}$$

10

$$\begin{aligned}
 & 9(10a - 6) + 8(7a - 1) \\
 & = 90a - 54 + 56a - 8 \\
 & = 90a + 56a - 54 - 8 \\
 & = 146a - 62
 \end{aligned}$$

1

$$10(-5a + 9) - 2a$$

2

$$-x + 7(6x + 1)$$

3

$$3(-2a + 1) + 8a$$

4

$$-2x - (-8x - 10)$$

5

$$8(-5a + 6) + 2(7a - 2)$$

6

$$-6(-5a - 9) - (-9a - 9)$$

7

$$-2(x + 3) - x$$

8

$$-2(-6a - 1) + 3a$$

9

$$5(-4a - 2) + 7(-5a - 8)$$

10

$$-3x + 7(4x - 10)$$

1

$$\begin{aligned}
 & 10(-5a + 9) - 2a \\
 &= -50a + 90 - 2a \\
 &= -50a - 2a + 90 \\
 &= -52a + 90
 \end{aligned}$$

2

$$\begin{aligned}
 -x + 7(6x + 1) &= -x + 42x + 7 \\
 &= 41x + 7
 \end{aligned}$$

3

$$\begin{aligned}
 3(-2a + 1) + 8a &= -6a + 3 + 8a \\
 &= -6a + 8a + 3 \\
 &= 2a + 3
 \end{aligned}$$

4

$$\begin{aligned}
 -2x - (-8x - 10) \\
 &= -2x + 8x + 10 \\
 &= 6x + 10
 \end{aligned}$$

5

$$\begin{aligned}
 & 8(-5a + 6) + 2(7a - 2) \\
 &= -40a + 48 + 14a - 4 \\
 &= -40a + 14a + 48 - 4 \\
 &= -26a + 44
 \end{aligned}$$

6

$$\begin{aligned}
 & -6(-5a - 9) - (-9a - 9) \\
 &= 30a + 54 + 9a + 9 \\
 &= 30a + 9a + 54 + 9 \\
 &= 39a + 63
 \end{aligned}$$

7

$$\begin{aligned}
 -2(x + 3) - x &= -2x - 6 - x \\
 &= -2x - x - 6 \\
 &= -3x - 6
 \end{aligned}$$

8

$$\begin{aligned}
 -2(-6a - 1) + 3a &= 12a + 2 + 3a \\
 &= 12a + 3a + 2 \\
 &= 15a + 2
 \end{aligned}$$

9

$$\begin{aligned}
 & 5(-4a - 2) + 7(-5a - 8) \\
 &= -20a - 10 - 35a - 56 \\
 &= -20a - 35a - 10 - 56 \\
 &= -55a - 66
 \end{aligned}$$

10

$$\begin{aligned}
 & -3x + 7(4x - 10) \\
 &= -3x + 28x - 70 \\
 &= 25x - 70
 \end{aligned}$$

1

$$-8(6a - 6) - 10a$$

2

$$6(-5a + 9) - 8(10a + 2)$$

3

$$6(-9x - 3) - 5(2x - 10)$$

4

$$-3(4a + 10) + 8a$$

5

$$5(-3a + 1) - 7(10a - 4)$$

6

$$9(-10x + 6) + 7x$$

7

$$-9(-8x + 7) + 7x$$

8

$$2(-6x + 8) - 5(8x - 9)$$

9

$$-2a + 7(4a + 5)$$

10

$$4x - 7(-7x - 9)$$

1

$$\begin{aligned}
 & -8(6a - 6) - 10a \\
 & = -48a + 48 - 10a \\
 & = -48a - 10a + 48 \\
 & = -58a + 48
 \end{aligned}$$

2

$$\begin{aligned}
 & 6(-5a + 9) - 8(10a + 2) \\
 & = -30a + 54 - 80a - 16 \\
 & = -30a - 80a + 54 - 16 \\
 & = -110a + 38
 \end{aligned}$$

3

$$\begin{aligned}
 & 6(-9x - 3) - 5(2x - 10) \\
 & = -54x - 18 - 10x + 50 \\
 & = -54x - 10x - 18 + 50 \\
 & = -64x + 32
 \end{aligned}$$

4

$$\begin{aligned}
 & -3(4a + 10) + 8a \\
 & = -12a - 30 + 8a \\
 & = -12a + 8a - 30 \\
 & = -4a - 30
 \end{aligned}$$

5

$$\begin{aligned}
 & 5(-3a + 1) - 7(10a - 4) \\
 & = -15a + 5 - 70a + 28 \\
 & = -15a - 70a + 5 + 28 \\
 & = -85a + 33
 \end{aligned}$$

6

$$\begin{aligned}
 & 9(-10x + 6) + 7x \\
 & = -90x + 54 + 7x \\
 & = -90x + 7x + 54 \\
 & = -83x + 54
 \end{aligned}$$

7

$$\begin{aligned}
 & -9(-8x + 7) + 7x \\
 & = 72x - 63 + 7x \\
 & = 72x + 7x - 63 \\
 & = 79x - 63
 \end{aligned}$$

8

$$\begin{aligned}
 & 2(-6x + 8) - 5(8x - 9) \\
 & = -12x + 16 - 40x + 45 \\
 & = -12x - 40x + 16 + 45 \\
 & = -52x + 61
 \end{aligned}$$

9

$$\begin{aligned}
 & -2a + 7(4a + 5) \\
 & = -2a + 28a + 35 \\
 & = 26a + 35
 \end{aligned}$$

10

$$\begin{aligned}
 4x - 7(-7x - 9) & = 4x + 49x + 63 \\
 & = 53x + 63
 \end{aligned}$$

1

$$5(x - 5) + 9x$$

2

$$-5(5a + 2) + 2(6a + 3)$$

3

$$-8(5a - 6) + 2(-7a - 2)$$

4

$$9(-7x + 3) - 10x$$

5

$$-6(-7x - 7) + 9x$$

6

$$10x + 5(2x + 9)$$

7

$$-9(10x - 6) + 7x$$

8

$$7(3x - 7) + 4(3x + 10)$$

9

$$7(-10x - 7) + 9(7x - 8)$$

10

$$-2(-9a - 6) + 5a$$

1

$$\begin{aligned} 5(x-5) + 9x &= 5x - 25 + 9x \\ &= 5x + 9x - 25 \\ &= 14x - 25 \end{aligned}$$

2

$$\begin{aligned} -5(5a+2) + 2(6a+3) &= -25a - 10 + 12a + 6 \\ &= -25a + 12a - 10 + 6 \\ &= -13a - 4 \end{aligned}$$

3

$$\begin{aligned} -8(5a-6) + 2(-7a-2) &= -40a + 48 - 14a - 4 \\ &= -40a - 14a + 48 - 4 \\ &= -54a + 44 \end{aligned}$$

4

$$\begin{aligned} 9(-7x+3) - 10x &= -63x + 27 - 10x \\ &= -63x - 10x + 27 \\ &= -73x + 27 \end{aligned}$$

5

$$\begin{aligned} -6(-7x-7) + 9x &= 42x + 42 + 9x \\ &= 42x + 9x + 42 \\ &= 51x + 42 \end{aligned}$$

6

$$\begin{aligned} 10x + 5(2x+9) &= 10x + 10x + 45 \\ &= 20x + 45 \end{aligned}$$

7

$$\begin{aligned} -9(10x-6) + 7x &= -90x + 54 + 7x \\ &= -90x + 7x + 54 \\ &= -83x + 54 \end{aligned}$$

8

$$\begin{aligned} 7(3x-7) + 4(3x+10) &= 21x - 49 + 12x + 40 \\ &= 21x + 12x - 49 + 40 \\ &= 33x - 9 \end{aligned}$$

9

$$\begin{aligned} 7(-10x-7) + 9(7x-8) &= -70x - 49 + 63x - 72 \\ &= -70x + 63x - 49 - 72 \\ &= -7x - 121 \end{aligned}$$

10

$$\begin{aligned} -2(-9a-6) + 5a &= 18a + 12 + 5a \\ &= 18a + 5a + 12 \\ &= 23a + 12 \end{aligned}$$

1

$$-6(-2x - 10) - 8(-4x - 3)$$

2

$$5a - 6(9a - 9)$$

3

$$-8x + 8(9x + 5)$$

4

$$-7(5a - 10) + 4(-5a + 9)$$

5

$$4(-3a + 6) + 3(-5a - 5)$$

6

$$10x - 10(-10x - 5)$$

7

$$5(-7x + 8) - 4(3x + 1)$$

8

$$-(9a + 9) - 6a$$

9

$$-5a + 6(10a + 9)$$

10

$$-4(9x - 9) - 2(-x - 9)$$

1

$$\begin{aligned}
 & -6(-2x - 10) - 8(-4x - 3) \\
 & = 12x + 60 + 32x + 24 \\
 & = 12x + 32x + 60 + 24 \\
 & = 44x + 84
 \end{aligned}$$

2

$$\begin{aligned}
 5a - 6(9a - 9) & = 5a - 54a + 54 \\
 & = -49a + 54
 \end{aligned}$$

3

$$\begin{aligned}
 & -8x + 8(9x + 5) \\
 & = -8x + 72x + 40 \\
 & = 64x + 40
 \end{aligned}$$

4

$$\begin{aligned}
 & -7(5a - 10) + 4(-5a + 9) \\
 & = -35a + 70 - 20a + 36 \\
 & = -35a - 20a + 70 + 36 \\
 & = -55a + 106
 \end{aligned}$$

5

$$\begin{aligned}
 & 4(-3a + 6) + 3(-5a - 5) \\
 & = -12a + 24 - 15a - 15 \\
 & = -12a - 15a + 24 - 15 \\
 & = -27a + 9
 \end{aligned}$$

6

$$\begin{aligned}
 & 10x - 10(-10x - 5) \\
 & = 10x + 100x + 50 \\
 & = 110x + 50
 \end{aligned}$$

7

$$\begin{aligned}
 & 5(-7x + 8) - 4(3x + 1) \\
 & = -35x + 40 - 12x - 4 \\
 & = -35x - 12x + 40 - 4 \\
 & = -47x + 36
 \end{aligned}$$

8

$$\begin{aligned}
 -(9a + 9) - 6a & = -9a - 9 - 6a \\
 & = -9a - 6a - 9 \\
 & = -15a - 9
 \end{aligned}$$

9

$$\begin{aligned}
 & -5a + 6(10a + 9) \\
 & = -5a + 60a + 54 \\
 & = 55a + 54
 \end{aligned}$$

10

$$\begin{aligned}
 & -4(9x - 9) - 2(-x - 9) \\
 & = -36x + 36 + 2x + 18 \\
 & = -36x + 2x + 36 + 18 \\
 & = -34x + 54
 \end{aligned}$$

1

$$-5(-7a + 1) + 6a$$

2

$$5(4a + 2) + 5a$$

3

$$-(-9a - 9) + 4(6a - 3)$$

4

$$-(9x + 3) - 6(-3x - 10)$$

5

$$9(-2x - 9) + 2x$$

6

$$2(2a - 9) + 3(6a + 9)$$

7

$$-2(-6x - 8) + 8x$$

8

$$7x - 9(-10x - 3)$$

9

$$2(7a - 9) + 9a$$

10

$$-6(10x + 2) + 9x$$

1

$$\begin{aligned}
 -5(-7a + 1) + 6a &= 35a - 5 + 6a \\
 &= 35a + 6a - 5 \\
 &= 41a - 5
 \end{aligned}$$

2

$$\begin{aligned}
 5(4a + 2) + 5a &= 20a + 10 + 5a \\
 &= 20a + 5a + 10 \\
 &= 25a + 10
 \end{aligned}$$

3

$$\begin{aligned}
 & -(-9a - 9) + 4(6a - 3) \\
 &= 9a + 9 + 24a - 12 \\
 &= 9a + 24a + 9 - 12 \\
 &= 33a - 3
 \end{aligned}$$

4

$$\begin{aligned}
 & -(9x + 3) - 6(-3x - 10) \\
 &= -9x - 3 + 18x + 60 \\
 &= -9x + 18x - 3 + 60 \\
 &= 9x + 57
 \end{aligned}$$

5

$$\begin{aligned}
 & 9(-2x - 9) + 2x \\
 &= -18x - 81 + 2x \\
 &= -18x + 2x - 81 \\
 &= -16x - 81
 \end{aligned}$$

6

$$\begin{aligned}
 & 2(2a - 9) + 3(6a + 9) \\
 &= 4a - 18 + 18a + 27 \\
 &= 4a + 18a - 18 + 27 \\
 &= 22a + 9
 \end{aligned}$$

7

$$\begin{aligned}
 & -2(-6x - 8) + 8x \\
 &= 12x + 16 + 8x \\
 &= 12x + 8x + 16 \\
 &= 20x + 16
 \end{aligned}$$

8

$$\begin{aligned}
 7x - 9(-10x - 3) &= 7x + 90x + 27 \\
 &= 97x + 27
 \end{aligned}$$

9

$$\begin{aligned}
 2(7a - 9) + 9a &= 14a - 18 + 9a \\
 &= 14a + 9a - 18 \\
 &= 23a - 18
 \end{aligned}$$

10

$$\begin{aligned}
 & -6(10x + 2) + 9x \\
 &= -60x - 12 + 9x \\
 &= -60x + 9x - 12 \\
 &= -51x - 12
 \end{aligned}$$

1

$$-8(4a - 2) - 6a$$

2

$$10(5x + 9) - 10(-2x + 5)$$

3

$$2a - (-10a + 8)$$

4

$$-6x - 8(x + 6)$$

5

$$2(-3x - 8) + x$$

6

$$-2(-6a - 3) + 3a$$

7

$$7a + 9(-10a - 3)$$

8

$$8x + 2(-8x + 5)$$

9

$$2a - 7(-2a - 9)$$

10

$$3(5x - 7) + 10x$$

1

$$\begin{aligned}
 & -8(4a - 2) - 6a \\
 & = -32a + 16 - 6a \\
 & = -32a - 6a + 16 \\
 & = -38a + 16
 \end{aligned}$$

2

$$\begin{aligned}
 & 10(5x + 9) - 10(-2x + 5) \\
 & = 50x + 90 + 20x - 50 \\
 & = 50x + 20x + 90 - 50 \\
 & = 70x + 40
 \end{aligned}$$

3

$$\begin{aligned}
 2a - (-10a + 8) & = 2a + 10a - 8 \\
 & = 12a - 8
 \end{aligned}$$

4

$$\begin{aligned}
 -6x - 8(x + 6) & = -6x - 8x - 48 \\
 & = -14x - 48
 \end{aligned}$$

5

$$\begin{aligned}
 2(-3x - 8) + x & = -6x - 16 + x \\
 & = -6x + x - 16 \\
 & = -5x - 16
 \end{aligned}$$

6

$$\begin{aligned}
 -2(-6a - 3) + 3a & = 12a + 6 + 3a \\
 & = 12a + 3a + 6 \\
 & = 15a + 6
 \end{aligned}$$

7

$$\begin{aligned}
 7a + 9(-10a - 3) & = 7a - 90a - 27 \\
 & = -83a - 27
 \end{aligned}$$

8

$$\begin{aligned}
 8x + 2(-8x + 5) & = 8x - 16x + 10 \\
 & = -8x + 10
 \end{aligned}$$

9

$$\begin{aligned}
 2a - 7(-2a - 9) & = 2a + 14a + 63 \\
 & = 16a + 63
 \end{aligned}$$

10

$$\begin{aligned}
 3(5x - 7) + 10x & = 15x - 21 + 10x \\
 & = 15x + 10x - 21 \\
 & = 25x - 21
 \end{aligned}$$

1

$$4x - 10(6x + 2)$$

2

$$-4(6x + 1) + 2x$$

3

$$6(-5a - 9) - (-9a + 9)$$

4

$$-2x - 3(8x + 1)$$

5

$$-7(-2x - 5) - 4x$$

6

$$-5x + 9(-8x + 7)$$

7

$$-2(3a - 8) + 9(-a + 10)$$

8

$$5x + 9(-7x + 10)$$

9

$$-3x - 7(-4x - 10)$$

10

$$-10(5a + 7) + 9(-9a - 10)$$

1

$$\begin{aligned}4x - 10(6x + 2) &= 4x - 60x - 20 \\ &= -56x - 20\end{aligned}$$

2

$$\begin{aligned}-4(6x + 1) + 2x &= -24x - 4 + 2x \\ &= -24x + 2x - 4 \\ &= -22x - 4\end{aligned}$$

3

$$\begin{aligned}6(-5a - 9) - (-9a + 9) \\ &= -30a - 54 + 9a - 9 \\ &= -30a + 9a - 54 - 9 \\ &= -21a - 63\end{aligned}$$

4

$$\begin{aligned}-2x - 3(8x + 1) &= -2x - 24x - 3 \\ &= -26x - 3\end{aligned}$$

5

$$\begin{aligned}-7(-2x - 5) - 4x \\ &= 14x + 35 - 4x \\ &= 14x - 4x + 35 \\ &= 10x + 35\end{aligned}$$

6

$$\begin{aligned}-5x + 9(-8x + 7) \\ &= -5x - 72x + 63 \\ &= -77x + 63\end{aligned}$$

7

$$\begin{aligned}-2(3a - 8) + 9(-a + 10) \\ &= -6a + 16 - 9a + 90 \\ &= -6a - 9a + 16 + 90 \\ &= -15a + 106\end{aligned}$$

8

$$\begin{aligned}5x + 9(-7x + 10) &= 5x - 63x + 90 \\ &= -58x + 90\end{aligned}$$

9

$$\begin{aligned}-3x - 7(-4x - 10) \\ &= -3x + 28x + 70 \\ &= 25x + 70\end{aligned}$$

10

$$\begin{aligned}-10(5a + 7) + 9(-9a - 10) \\ &= -50a - 70 - 81a - 90 \\ &= -50a - 81a - 70 - 90 \\ &= -131a - 160\end{aligned}$$

1

$$5(-7a + 2) - 8a$$

2

$$10(a + 9) - 2a$$

3

$$6(-7x - 1) + 6x$$

4

$$-5a - 8(7a - 6)$$

5

$$5a + 5(6a - 2)$$

6

$$8(5x - 6) + 2(7x + 2)$$

7

$$-3a + 5(10a - 1)$$

8

$$8a + 4(-10a - 2)$$

9

$$-10(-a - 6) - 3(-a - 10)$$

10

$$-3x + 4(5x + 6)$$

1

$$\begin{aligned}
 & 5(-7a + 2) - 8a \\
 &= -35a + 10 - 8a \\
 &= -35a - 8a + 10 \\
 &= -43a + 10
 \end{aligned}$$

2

$$\begin{aligned}
 10(a + 9) - 2a &= 10a + 90 - 2a \\
 &= 10a - 2a + 90 \\
 &= 8a + 90
 \end{aligned}$$

3

$$\begin{aligned}
 6(-7x - 1) + 6x &= -42x - 6 + 6x \\
 &= -42x + 6x - 6 \\
 &= -36x - 6
 \end{aligned}$$

4

$$\begin{aligned}
 -5a - 8(7a - 6) & \\
 &= -5a - 56a + 48 \\
 &= -61a + 48
 \end{aligned}$$

5

$$\begin{aligned}
 5a + 5(6a - 2) &= 5a + 30a - 10 \\
 &= 35a - 10
 \end{aligned}$$

6

$$\begin{aligned}
 8(5x - 6) + 2(7x + 2) & \\
 &= 40x - 48 + 14x + 4 \\
 &= 40x + 14x - 48 + 4 \\
 &= 54x - 44
 \end{aligned}$$

7

$$\begin{aligned}
 -3a + 5(10a - 1) & \\
 &= -3a + 50a - 5 \\
 &= 47a - 5
 \end{aligned}$$

8

$$\begin{aligned}
 8a + 4(-10a - 2) &= 8a - 40a - 8 \\
 &= -32a - 8
 \end{aligned}$$

9

$$\begin{aligned}
 -10(-a - 6) - 3(-a - 10) & \\
 &= 10a + 60 + 3a + 30 \\
 &= 10a + 3a + 60 + 30 \\
 &= 13a + 90
 \end{aligned}$$

10

$$\begin{aligned}
 -3x + 4(5x + 6) & \\
 &= -3x + 20x + 24 \\
 &= 17x + 24
 \end{aligned}$$

1

$$-5a - 7(-5a - 10)$$

2

$$-6(5x + 5) + 9(8x - 9)$$

3

$$8(8x + 5) + 9x$$

4

$$2(-7a - 9) - 8a$$

5

$$-5a + 10(-7a - 8)$$

6

$$5x + 9(x + 7)$$

7

$$-9(-3x - 2) - 8x$$

8

$$-9(-5a + 7) - a$$

9

$$-(-4a - 7) - 9(4a + 10)$$

10

$$5x - 10(-7x + 8)$$

1

$$\begin{aligned}
 & -5a - 7(-5a - 10) \\
 &= -5a + 35a + 70 \\
 &= 30a + 70
 \end{aligned}$$

2

$$\begin{aligned}
 & -6(5x + 5) + 9(8x - 9) \\
 &= -30x - 30 + 72x - 81 \\
 &= -30x + 72x - 30 - 81 \\
 &= 42x - 111
 \end{aligned}$$

3

$$\begin{aligned}
 8(8x + 5) + 9x &= 64x + 40 + 9x \\
 &= 64x + 9x + 40 \\
 &= 73x + 40
 \end{aligned}$$

4

$$\begin{aligned}
 2(-7a - 9) - 8a \\
 &= -14a - 18 - 8a \\
 &= -14a - 8a - 18 \\
 &= -22a - 18
 \end{aligned}$$

5

$$\begin{aligned}
 & -5a + 10(-7a - 8) \\
 &= -5a - 70a - 80 \\
 &= -75a - 80
 \end{aligned}$$

6

$$\begin{aligned}
 5x + 9(x + 7) &= 5x + 9x + 63 \\
 &= 14x + 63
 \end{aligned}$$

7

$$\begin{aligned}
 & -9(-3x - 2) - 8x \\
 &= 27x + 18 - 8x \\
 &= 27x - 8x + 18 \\
 &= 19x + 18
 \end{aligned}$$

8

$$\begin{aligned}
 -9(-5a + 7) - a &= 45a - 63 - a \\
 &= 45a - a - 63 \\
 &= 44a - 63
 \end{aligned}$$

9

$$\begin{aligned}
 & -(-4a - 7) - 9(4a + 10) \\
 &= 4a + 7 - 36a - 90 \\
 &= 4a - 36a + 7 - 90 \\
 &= -32a - 83
 \end{aligned}$$

10

$$\begin{aligned}
 5x - 10(-7x + 8) &= 5x + 70x - 80 \\
 &= 75x - 80
 \end{aligned}$$

1

$$5(-8x - 9) - 4x$$

2

$$-8(-3x - 10) + 3x$$

3

$$-5(-5a - 9) + 3(9a + 9)$$

4

$$-9(4x - 6) - 2x$$

5

$$-(9a - 3) + 6(3a + 10)$$

6

$$6(-10a - 4) + 3a$$

7

$$-4a - 2(-10a + 3)$$

8

$$4(-6x - 6) - 10(-10x - 3)$$

9

$$-5(-6x - 1) - 8x$$

10

$$-5x - 9(7x - 10)$$

1

$$\begin{aligned}
& 5(-8x - 9) - 4x \\
&= -40x - 45 - 4x \\
&= -40x - 4x - 45 \\
&= -44x - 45
\end{aligned}$$

2

$$\begin{aligned}
& -8(-3x - 10) + 3x \\
&= 24x + 80 + 3x \\
&= 24x + 3x + 80 \\
&= 27x + 80
\end{aligned}$$

3

$$\begin{aligned}
& -5(-5a - 9) + 3(9a + 9) \\
&= 25a + 45 + 27a + 27 \\
&= 25a + 27a + 45 + 27 \\
&= 52a + 72
\end{aligned}$$

4

$$\begin{aligned}
& -9(4x - 6) - 2x \\
&= -36x + 54 - 2x \\
&= -36x - 2x + 54 \\
&= -38x + 54
\end{aligned}$$

5

$$\begin{aligned}
& -(9a - 3) + 6(3a + 10) \\
&= -9a + 3 + 18a + 60 \\
&= -9a + 18a + 3 + 60 \\
&= 9a + 63
\end{aligned}$$

6

$$\begin{aligned}
& 6(-10a - 4) + 3a \\
&= -60a - 24 + 3a \\
&= -60a + 3a - 24 \\
&= -57a - 24
\end{aligned}$$

7

$$\begin{aligned}
& -4a - 2(-10a + 3) \\
&= -4a + 20a - 6 \\
&= 16a - 6
\end{aligned}$$

8

$$\begin{aligned}
& 4(-6x - 6) - 10(-10x - 3) \\
&= -24x - 24 + 100x + 30 \\
&= -24x + 100x - 24 + 30 \\
&= 76x + 6
\end{aligned}$$

9

$$\begin{aligned}
-5(-6x - 1) - 8x &= 30x + 5 - 8x \\
&= 30x - 8x + 5 \\
&= 22x + 5
\end{aligned}$$

10

$$\begin{aligned}
-5x - 9(7x - 10) &= -5x - 63x + 90 \\
&= -5x - 63x + 90 \\
&= -68x + 90
\end{aligned}$$

1

$$-(-x + 8) + 2(4x + 4)$$

2

$$8a + 5(4a + 9)$$

3

$$6(-9x + 5) + 7x$$

4

$$8(3x + 5) + 3(9x + 7)$$

5

$$10(-5a + 9) - 2a$$

6

$$-4(6x - 1) + 2x$$

7

$$-5x - 3(10x + 7)$$

8

$$-6(9x - 5) - 7x$$

9

$$5(-3x + 10) + 2x$$

10

$$2(-8a + 5) - 5(-8a + 4)$$

1

$$\begin{aligned} & -(-x + 8) + 2(4x + 4) \\ &= x - 8 + 8x + 8 \\ &= x + 8x - 8 + 8 \\ &= 9x \end{aligned}$$

3

$$\begin{aligned} & 6(-9x + 5) + 7x \\ &= -54x + 30 + 7x \\ &= -54x + 7x + 30 \\ &= -47x + 30 \end{aligned}$$

5

$$\begin{aligned} & 10(-5a + 9) - 2a \\ &= -50a + 90 - 2a \\ &= -50a - 2a + 90 \\ &= -52a + 90 \end{aligned}$$

7

$$\begin{aligned} & -5x - 3(10x + 7) \\ &= -5x - 30x - 21 \\ &= -35x - 21 \end{aligned}$$

9

$$\begin{aligned} & 5(-3x + 10) + 2x \\ &= -15x + 50 + 2x \\ &= -15x + 2x + 50 \\ &= -13x + 50 \end{aligned}$$

2

$$\begin{aligned} 8a + 5(4a + 9) &= 8a + 20a + 45 \\ &= 28a + 45 \end{aligned}$$

4

$$\begin{aligned} & 8(3x + 5) + 3(9x + 7) \\ &= 24x + 40 + 27x + 21 \\ &= 24x + 27x + 40 + 21 \\ &= 51x + 61 \end{aligned}$$

6

$$\begin{aligned} -4(6x - 1) + 2x &= -24x + 4 + 2x \\ &= -24x + 2x + 4 \\ &= -22x + 4 \end{aligned}$$

8

$$\begin{aligned} & -6(9x - 5) - 7x \\ &= -54x + 30 - 7x \\ &= -54x - 7x + 30 \\ &= -61x + 30 \end{aligned}$$

10

$$\begin{aligned} & 2(-8a + 5) - 5(-8a + 4) \\ &= -16a + 10 + 40a - 20 \\ &= -16a + 40a + 10 - 20 \\ &= 24a - 10 \end{aligned}$$