

すきプリ 中学数学

正負の数 累乗の計算問題

もくじ

累乗の指数

累乗のみの計算問題

累乗を含む計算問題

問題

次の積を、累乗の指数を使って表しましょう。

①

$$2 \times 2 \times 2 \times 2$$

②

$$-15 \times 15$$

③

$$\frac{2}{7} \times \frac{2}{7}$$

④

$$\left(-\frac{3}{2}\right) \times \left(-\frac{3}{2}\right)$$

⑤

$$1 \times 1 \times 1 \times 1$$

⑥

$$-4 \times 4 \times 4 \times 4$$

⑦

$$-19 \times 19$$

⑧

$$\left(-\frac{5}{7}\right) \times \left(-\frac{5}{7}\right)$$

⑨

$$\left(-\frac{6}{7}\right) \times \left(-\frac{6}{7}\right)$$

⑩

$$\left(-\frac{2}{7}\right) \times \left(-\frac{2}{7}\right)$$

1

$$2^4$$

2

$$-15^2$$

3

$$\left(\frac{2}{7}\right)^2$$

4

$$\left(-\frac{3}{2}\right)^2$$

5

$$1^4$$

6

$$-4^4$$

7

$$-19^2$$

8

$$\left(-\frac{5}{7}\right)^2$$

9

$$\left(-\frac{6}{7}\right)^2$$

10

$$\left(-\frac{2}{7}\right)^2$$

①

$$(-14) \times (-14)$$

②

$$-1 \times 1$$

③

$$(-1) \times (-1)$$

④

$$12 \times 12$$

⑤

$$7 \times 7 \times 7$$

⑥

$$\frac{5}{3} \times \frac{5}{3}$$

⑦

$$-4 \times 4$$

⑧

$$\frac{1}{7} \times \frac{1}{7}$$

⑨

$$(-3) \times (-3) \times (-3)$$

⑩

$$\left(-\frac{4}{3}\right) \times \left(-\frac{4}{3}\right)$$

1

$$(-14)^2$$

2

$$-1^2$$

3

$$(-1)^2$$

4

$$12^2$$

5

$$7^3$$

6

$$\left(\frac{5}{3}\right)^2$$

7

$$-4^2$$

8

$$\left(\frac{1}{7}\right)^2$$

9

$$(-3)^3$$

10

$$\left(-\frac{4}{3}\right)^2$$

①

$$6 \times 6$$

②

$$\left(-\frac{6}{5}\right) \times \left(-\frac{6}{5}\right)$$

③

$$-5 \times 5$$

④

$$(-12) \times (-12)$$

⑤

$$\left(-\frac{3}{4}\right) \times \left(-\frac{3}{4}\right)$$

⑥

$$\frac{1}{2} \times \frac{1}{2}$$

⑦

$$\frac{3}{2} \times \frac{3}{2}$$

⑧

$$-8 \times 8$$

⑨

$$\frac{5}{7} \times \frac{5}{7}$$

⑩

$$18 \times 18$$

1

$$6^2$$

2

$$\left(-\frac{6}{5}\right)^2$$

3

$$-5^2$$

4

$$(-12)^2$$

5

$$\left(-\frac{3}{4}\right)^2$$

6

$$\left(\frac{1}{2}\right)^2$$

7

$$\left(\frac{3}{2}\right)^2$$

8

$$-8^2$$

9

$$\left(\frac{5}{7}\right)^2$$

10

$$18^2$$

①

$$\left(-\frac{3}{5}\right) \times \left(-\frac{3}{5}\right)$$

②

$$2 \times 2$$

③

$$3 \times 3 \times 3$$

④

$$(-1) \times (-1) \times (-1) \times (-1)$$

⑤

$$\frac{2}{5} \times \frac{2}{5}$$

⑥

$$(-6) \times (-6)$$

⑦

$$\frac{1}{3} \times \frac{1}{3} \times \frac{1}{3}$$

⑧

$$\frac{5}{4} \times \frac{5}{4}$$

⑨

$$-10 \times 10$$

⑩

$$\frac{2}{3} \times \frac{2}{3}$$

1

$$\left(-\frac{3}{5}\right)^2$$

2

$$2^2$$

3

$$3^3$$

4

$$(-1)^4$$

5

$$\left(\frac{2}{5}\right)^2$$

6

$$(-6)^2$$

7

$$\left(\frac{1}{3}\right)^3$$

8

$$\left(\frac{5}{4}\right)^2$$

9

$$-10^2$$

10

$$\left(\frac{2}{3}\right)^2$$

①

$$\frac{3}{2} \times \frac{3}{2} \times \frac{3}{2}$$

②

$$(-19) \times (-19)$$

③

$$(-5) \times (-5)$$

④

$$\frac{7}{2} \times \frac{7}{2}$$

⑤

$$3 \times 3$$

⑥

$$(-17) \times (-17)$$

⑦

$$4 \times 4$$

⑧

$$-2 \times 2$$

⑨

$$\left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right)$$

⑩

$$\left(-\frac{5}{6}\right) \times \left(-\frac{5}{6}\right)$$

1

$$\left(\frac{3}{2}\right)^3$$

2

$$(-19)^2$$

3

$$(-5)^2$$

4

$$\left(\frac{7}{2}\right)^2$$

5

$$3^2$$

6

$$(-17)^2$$

7

$$4^2$$

8

$$-2^2$$

9

$$\left(-\frac{2}{3}\right)^2$$

10

$$\left(-\frac{5}{6}\right)^2$$

①

$$-6 \times 6 \times 6$$

②

$$\frac{6}{5} \times \frac{6}{5}$$

③

$$16 \times 16$$

④

$$\frac{7}{4} \times \frac{7}{4}$$

⑤

$$\left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right) \times \left(-\frac{2}{3}\right)$$

⑥

$$-6 \times 6$$

⑦

$$\frac{3}{4} \times \frac{3}{4}$$

⑧

$$(-2) \times (-2)$$

⑨

$$\frac{4}{5} \times \frac{4}{5}$$

⑩

$$(-5) \times (-5) \times (-5)$$

1

$$-6^3$$

2

$$\left(\frac{6}{5}\right)^2$$

3

$$16^2$$

4

$$\left(\frac{7}{4}\right)^2$$

5

$$\left(-\frac{2}{3}\right)^3$$

6

$$-6^2$$

7

$$\left(\frac{3}{4}\right)^2$$

8

$$(-2)^2$$

9

$$\left(\frac{4}{5}\right)^2$$

10

$$(-5)^3$$

①

$$\frac{6}{7} \times \frac{6}{7}$$

②

$$(-1) \times (-1) \times (-1)$$

③

$$1 \times 1$$

④

$$-4 \times 4 \times 4$$

⑤

$$-13 \times 13$$

⑥

$$-18 \times 18$$

⑦

$$9 \times 9$$

⑧

$$(-16) \times (-16)$$

⑨

$$\frac{7}{6} \times \frac{7}{6}$$

⑩

$$-2 \times 2 \times 2$$

1

$$\left(\frac{6}{7}\right)^2$$

2

$$(-1)^3$$

3

$$1^2$$

4

$$-4^3$$

5

$$-13^2$$

6

$$-18^2$$

7

$$9^2$$

8

$$(-16)^2$$

9

$$\left(\frac{7}{6}\right)^2$$

10

$$-2^3$$

①

$$\frac{1}{5} \times \frac{1}{5}$$

②

$$-9 \times 9$$

③

$$\frac{3}{7} \times \frac{3}{7}$$

④

$$\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$$

⑤

$$20 \times 20$$

⑥

$$\left(-\frac{1}{4}\right) \times \left(-\frac{1}{4}\right)$$

⑦

$$\left(-\frac{5}{2}\right) \times \left(-\frac{5}{2}\right)$$

⑧

$$\frac{7}{5} \times \frac{7}{5}$$

⑨

$$\frac{1}{4} \times \frac{1}{4}$$

⑩

$$5 \times 5 \times 5$$

1

$$\left(\frac{1}{5}\right)^2$$

2

$$-9^2$$

3

$$\left(\frac{3}{7}\right)^2$$

4

$$\left(\frac{1}{2}\right)^3$$

5

$$20^2$$

6

$$\left(-\frac{1}{4}\right)^2$$

7

$$\left(-\frac{5}{2}\right)^2$$

8

$$\left(\frac{7}{5}\right)^2$$

9

$$\left(\frac{1}{4}\right)^2$$

10

$$5^3$$

問題

累乗の計算をしましょう。

$$\textcircled{1}$$

$$(-1)^2$$

$$\textcircled{2}$$

$$-12^2$$

$$\textcircled{3}$$

$$-6^2$$

$$\textcircled{4}$$

$$(-3^2)$$

$$\textcircled{5}$$

$$-3^4$$

$$\textcircled{6}$$

$$(-2)^2$$

$$\textcircled{7}$$

$$\left(\frac{1}{4}\right)^2$$

$$\textcircled{8}$$

$$\left(\frac{2}{3}\right)^3$$

①

$$\begin{aligned}(-1)^2 &= (-1) \times (-1) \\ &= 1\end{aligned}$$

②

$$\begin{aligned}-12^2 &= -12 \times 12 \\ &= -144\end{aligned}$$

③

$$\begin{aligned}-6^2 &= -6 \times 6 \\ &= -36\end{aligned}$$

④

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

⑤

$$\begin{aligned}-3^4 & \\ &= -3 \times 3 \times 3 \times 3 \\ &= -81\end{aligned}$$

⑥

$$\begin{aligned}(-2)^2 &= (-2) \times (-2) \\ &= 4\end{aligned}$$

⑦

$$\begin{aligned}\left(\frac{1}{4}\right)^2 &= \frac{1}{4} \times \frac{1}{4} \\ &= \frac{1}{16}\end{aligned}$$

⑧

$$\begin{aligned}\left(\frac{2}{3}\right)^3 &= \frac{2}{3} \times \frac{2}{3} \times \frac{2}{3} \\ &= \frac{8}{27}\end{aligned}$$

$$\textcircled{9}$$

$$\left(-\frac{3}{2}\right)^2$$

$$\textcircled{10}$$

$$14^2$$

$$\textcircled{11}$$

$$(-1^3)$$

$$\textcircled{12}$$

$$\left(-\frac{1}{2}\right)^2$$

$$\textcircled{13}$$

$$3^3$$

$$\textcircled{14}$$

$$\left(\frac{6}{7}\right)^2$$

$$\textcircled{15}$$

$$\left(\frac{7}{5}\right)^2$$

$$\textcircled{16}$$

$$\left(-\frac{1}{3}\right)^3$$

9

$$\begin{aligned}\left(-\frac{3}{2}\right)^2 &= \left(-\frac{3}{2}\right) \times \left(-\frac{3}{2}\right) \\ &= \frac{9}{4}\end{aligned}$$

10

$$\begin{aligned}14^2 &= 14 \times 14 \\ &= 196\end{aligned}$$

11

$$\begin{aligned}(-1^3) &= -1 \times 1 \times 1 \\ &= -1\end{aligned}$$

12

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

13

$$\begin{aligned}3^3 &= 3 \times 3 \times 3 \\ &= 27\end{aligned}$$

14

$$\begin{aligned}\left(\frac{6}{7}\right)^2 &= \frac{6}{7} \times \frac{6}{7} \\ &= \frac{36}{49}\end{aligned}$$

15

$$\begin{aligned}\left(\frac{7}{5}\right)^2 &= \frac{7}{5} \times \frac{7}{5} \\ &= \frac{49}{25}\end{aligned}$$

16

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

$$\textcircled{17}$$

$$\left(\frac{1}{2}\right)^3$$

$$\textcircled{18}$$

$$11^2$$

$$\textcircled{19}$$

$$\left(-\frac{6}{5}\right)^2$$

$$\textcircled{20}$$

$$10^2$$

$$\textcircled{21}$$

$$1^4$$

$$\textcircled{22}$$

$$-9^2$$

$$\textcircled{23}$$

$$(-7)^2$$

$$\textcircled{24}$$

$$\left(\frac{5}{2}\right)^2$$

17

$$\begin{aligned}\left(\frac{1}{2}\right)^3 &= \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \\ &= \frac{1}{8}\end{aligned}$$

18

$$\begin{aligned}11^2 &= 11 \times 11 \\ &= 121\end{aligned}$$

19

$$\begin{aligned}\left(-\frac{6}{5}\right)^2 &= \left(-\frac{6}{5}\right) \times \left(-\frac{6}{5}\right) \\ &= \frac{36}{25}\end{aligned}$$

20

$$\begin{aligned}10^2 &= 10 \times 10 \\ &= 100\end{aligned}$$

21

$$\begin{aligned}1^4 &= 1 \times 1 \times 1 \times 1 \\ &= 1\end{aligned}$$

22

$$\begin{aligned}-9^2 &= -9 \times 9 \\ &= -81\end{aligned}$$

23

$$\begin{aligned}(-7)^2 &= (-7) \times (-7) \\ &= 49\end{aligned}$$

24

$$\begin{aligned}\left(\frac{5}{2}\right)^2 &= \frac{5}{2} \times \frac{5}{2} \\ &= \frac{25}{4}\end{aligned}$$

25

$$\left(-\frac{3}{7}\right)^2$$

26

$$(-7^2)$$

27

$$\left(-\frac{3}{5}\right)^2$$

28

$$-7^2$$

29

$$-10^2$$

30

$$-1^2$$

31

$$(-4^3)$$

32

$$\left(\frac{4}{7}\right)^2$$

25

$$\begin{aligned}\left(-\frac{3}{7}\right)^2 &= \left(-\frac{3}{7}\right) \times \left(-\frac{3}{7}\right) \\ &= \frac{9}{49}\end{aligned}$$

26

$$\begin{aligned}(-7^2) &= -7 \times 7 \\ &= -49\end{aligned}$$

27

$$\begin{aligned}\left(-\frac{3}{5}\right)^2 &= \left(-\frac{3}{5}\right) \times \left(-\frac{3}{5}\right) \\ &= \frac{9}{25}\end{aligned}$$

28

$$\begin{aligned}-7^2 &= -7 \times 7 \\ &= -49\end{aligned}$$

29

$$\begin{aligned}-10^2 &= -10 \times 10 \\ &= -100\end{aligned}$$

30

$$\begin{aligned}-1^2 &= -1 \times 1 \\ &= -1\end{aligned}$$

31

$$\begin{aligned}(-4^3) &= -4 \times 4 \times 4 \\ &= -64\end{aligned}$$

32

$$\begin{aligned}\left(\frac{4}{7}\right)^2 &= \frac{4}{7} \times \frac{4}{7} \\ &= \frac{16}{49}\end{aligned}$$

$$\textcircled{33}$$

$$\left(-\frac{7}{2}\right)^2$$

$$\textcircled{34}$$

$$-11^2$$

$$\textcircled{35}$$

$$-8^2$$

$$\textcircled{36}$$

$$(-6)^2$$

$$\textcircled{37}$$

$$\left(-\frac{2}{7}\right)^2$$

$$\textcircled{38}$$

$$(-5)^2$$

$$\textcircled{39}$$

$$(-10^2)$$

$$\textcircled{40}$$

$$\left(-\frac{5}{7}\right)^2$$

33

$$\begin{aligned}\left(-\frac{7}{2}\right)^2 &= \left(-\frac{7}{2}\right) \times \left(-\frac{7}{2}\right) \\ &= \frac{49}{4}\end{aligned}$$

34

$$\begin{aligned}-11^2 &= -11 \times 11 \\ &= -121\end{aligned}$$

35

$$\begin{aligned}-8^2 &= -8 \times 8 \\ &= -64\end{aligned}$$

36

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

37

$$\begin{aligned}\left(-\frac{2}{7}\right)^2 &= \left(-\frac{2}{7}\right) \times \left(-\frac{2}{7}\right) \\ &= \frac{4}{49}\end{aligned}$$

38

$$\begin{aligned}(-5)^2 &= (-5) \times (-5) \\ &= 25\end{aligned}$$

39

$$\begin{aligned}(-10^2) &= -10 \times 10 \\ &= -100\end{aligned}$$

40

$$\begin{aligned}\left(-\frac{5}{7}\right)^2 &= \left(-\frac{5}{7}\right) \times \left(-\frac{5}{7}\right) \\ &= \frac{25}{49}\end{aligned}$$

$$\textcircled{1}$$

$$-3^3$$

$$\textcircled{2}$$

$$-14^2$$

$$\textcircled{3}$$

$$\left(-\frac{3}{4}\right)^2$$

$$\textcircled{4}$$

$$-4^2$$

$$\textcircled{5}$$

$$\left(\frac{1}{6}\right)^2$$

$$\textcircled{6}$$

$$\left(-\frac{5}{6}\right)^2$$

$$\textcircled{7}$$

$$(-11)^2$$

$$\textcircled{8}$$

$$3^2$$

1

$$\begin{aligned} -3^3 &= -3 \times 3 \times 3 \\ &= -27 \end{aligned}$$

2

$$\begin{aligned} -14^2 &= -14 \times 14 \\ &= -196 \end{aligned}$$

3

$$\begin{aligned} \left(-\frac{3}{4}\right)^2 &= \left(-\frac{3}{4}\right) \times \left(-\frac{3}{4}\right) \\ &= \frac{9}{16} \end{aligned}$$

4

$$\begin{aligned} -4^2 &= -4 \times 4 \\ &= -16 \end{aligned}$$

5

$$\begin{aligned} \left(\frac{1}{6}\right)^2 &= \frac{1}{6} \times \frac{1}{6} \\ &= \frac{1}{36} \end{aligned}$$

6

$$\begin{aligned} \left(-\frac{5}{6}\right)^2 &= \left(-\frac{5}{6}\right) \times \left(-\frac{5}{6}\right) \\ &= \frac{25}{36} \end{aligned}$$

7

$$\begin{aligned} (-11)^2 &= (-11) \times (-11) \\ &= 121 \end{aligned}$$

8

$$\begin{aligned} 3^2 &= 3 \times 3 \\ &= 9 \end{aligned}$$

$$\textcircled{9}$$

$$\left(\frac{1}{2}\right)^2$$

$$\textcircled{10}$$

$$8^2$$

$$\textcircled{11}$$

$$\left(-\frac{7}{5}\right)^2$$

$$\textcircled{12}$$

$$\left(-\frac{1}{7}\right)^2$$

$$\textcircled{13}$$

$$(-2^3)$$

$$\textcircled{14}$$

$$(-6^2)$$

$$\textcircled{15}$$

$$(-4)^3$$

$$\textcircled{16}$$

$$\left(\frac{3}{2}\right)^3$$

9

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

10

$$\begin{aligned}8^2 &= 8 \times 8 \\ &= 64\end{aligned}$$

11

$$\begin{aligned}\left(-\frac{7}{5}\right)^2 &= \left(-\frac{7}{5}\right) \times \left(-\frac{7}{5}\right) \\ &= \frac{49}{25}\end{aligned}$$

12

$$\begin{aligned}\left(-\frac{1}{7}\right)^2 &= \left(-\frac{1}{7}\right) \times \left(-\frac{1}{7}\right) \\ &= \frac{1}{49}\end{aligned}$$

13

$$\begin{aligned}(-2^3) &= -2 \times 2 \times 2 \\ &= -8\end{aligned}$$

14

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

15

$$\begin{aligned}(-4)^3 &= (-4) \times (-4) \times (-4) \\ &= -64\end{aligned}$$

16

$$\begin{aligned}\left(\frac{3}{2}\right)^3 &= \frac{3}{2} \times \frac{3}{2} \times \frac{3}{2} \\ &= \frac{27}{8}\end{aligned}$$

$$\textcircled{17}$$

$$(-4)^2$$

$$\textcircled{18}$$

$$(-3)^3$$

$$\textcircled{19}$$

$$(-5^2)$$

$$\textcircled{20}$$

$$6^2$$

$$\textcircled{21}$$

$$\left(\frac{3}{4}\right)^2$$

$$\textcircled{22}$$

$$(-1^2)$$

$$\textcircled{23}$$

$$-4^3$$

$$\textcircled{24}$$

$$(-5)^3$$

17

$$\begin{aligned}(-4)^2 &= (-4) \times (-4) \\ &= 16\end{aligned}$$

18

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

19

$$\begin{aligned}(-5^2) &= -5 \times 5 \\ &= -25\end{aligned}$$

20

$$\begin{aligned}6^2 &= 6 \times 6 \\ &= 36\end{aligned}$$

21

$$\begin{aligned}\left(\frac{3}{4}\right)^2 &= \frac{3}{4} \times \frac{3}{4} \\ &= \frac{9}{16}\end{aligned}$$

22

$$\begin{aligned}(-1^2) &= -1 \times 1 \\ &= -1\end{aligned}$$

23

$$\begin{aligned}-4^3 &= -4 \times 4 \times 4 \\ &= -64\end{aligned}$$

24

$$\begin{aligned}(-5)^3 &= (-5) \times (-5) \times (-5) \\ &= -125\end{aligned}$$

$$\textcircled{25}$$

$$5^3$$

$$\textcircled{26}$$

$$(-2)^4$$

$$\textcircled{27}$$

$$-2^2$$

$$\textcircled{28}$$

$$\left(\frac{1}{3}\right)^2$$

$$\textcircled{29}$$

$$\left(\frac{7}{6}\right)^2$$

$$\textcircled{30}$$

$$\left(\frac{3}{5}\right)^2$$

$$\textcircled{31}$$

$$\left(\frac{7}{2}\right)^2$$

$$\textcircled{32}$$

$$12^2$$

25

$$\begin{aligned}5^3 &= 5 \times 5 \times 5 \\ &= 125\end{aligned}$$

26

$$\begin{aligned}(-2)^4 &= (-2) \times (-2) \times (-2) \times (-2) \\ &= 16\end{aligned}$$

27

$$\begin{aligned}-2^2 &= -2 \times 2 \\ &= -4\end{aligned}$$

28

$$\begin{aligned}\left(\frac{1}{3}\right)^2 &= \frac{1}{3} \times \frac{1}{3} \\ &= \frac{1}{9}\end{aligned}$$

29

$$\begin{aligned}\left(\frac{7}{6}\right)^2 &= \frac{7}{6} \times \frac{7}{6} \\ &= \frac{49}{36}\end{aligned}$$

30

$$\begin{aligned}\left(\frac{3}{5}\right)^2 &= \frac{3}{5} \times \frac{3}{5} \\ &= \frac{9}{25}\end{aligned}$$

31

$$\begin{aligned}\left(\frac{7}{2}\right)^2 &= \frac{7}{2} \times \frac{7}{2} \\ &= \frac{49}{4}\end{aligned}$$

32

$$\begin{aligned}12^2 &= 12 \times 12 \\ &= 144\end{aligned}$$

$$\textcircled{33}$$

$$5^2$$

$$\textcircled{34}$$

$$\left(\frac{5}{4}\right)^2$$

$$\textcircled{35}$$

$$4^3$$

$$\textcircled{36}$$

$$(-8)^2$$

$$\textcircled{37}$$

$$\left(-\frac{1}{2}\right)^3$$

$$\textcircled{38}$$

$$-13^2$$

$$\textcircled{39}$$

$$\left(\frac{2}{3}\right)^2$$

$$\textcircled{40}$$

$$\left(-\frac{2}{5}\right)^2$$

33

$$\begin{aligned}5^2 &= 5 \times 5 \\ &= 25\end{aligned}$$

34

$$\begin{aligned}\left(\frac{5}{4}\right)^2 &= \frac{5}{4} \times \frac{5}{4} \\ &= \frac{25}{16}\end{aligned}$$

35

$$\begin{aligned}4^3 &= 4 \times 4 \times 4 \\ &= 64\end{aligned}$$

36

$$\begin{aligned}(-8)^2 &= (-8) \times (-8) \\ &= 64\end{aligned}$$

37

$$\begin{aligned}\left(-\frac{1}{2}\right)^3 &= \left(-\frac{1}{2}\right) \times \left(-\frac{1}{2}\right) \times \left(-\frac{1}{2}\right) \\ &= -\frac{1}{8}\end{aligned}$$

38

$$\begin{aligned}-13^2 &= -13 \times 13 \\ &= -169\end{aligned}$$

39

$$\begin{aligned}\left(\frac{2}{3}\right)^2 &= \frac{2}{3} \times \frac{2}{3} \\ &= \frac{4}{9}\end{aligned}$$

40

$$\begin{aligned}\left(-\frac{2}{5}\right)^2 &= \left(-\frac{2}{5}\right) \times \left(-\frac{2}{5}\right) \\ &= \frac{4}{25}\end{aligned}$$

問題

計算しましょう。

①

$$\left(\frac{2}{7}\right)^2 \times (-7)^2$$

②

$$\frac{9}{8} \times \left(-\frac{4}{3}\right)^2$$

③

$$\frac{8}{9} \times \left(\frac{9}{4}\right)^2$$

④

$$\left(\frac{3}{2}\right)^2 \times \left(-\frac{20}{7}\right) \times \frac{7}{18}$$

⑤

$$-2^2 \times \frac{3}{20}$$

⑥

$$-\frac{13}{3} \times 3^3$$

1

$$\begin{aligned} & \left(\frac{2}{7}\right)^2 \times (-7)^2 \\ &= \frac{4}{49} \times (-7)^2 \\ &= \frac{4}{49} \times 49 \\ &= 4 \end{aligned}$$

2

$$\begin{aligned} & \frac{9}{8} \times \left(-\frac{4}{3}\right)^2 \\ &= \frac{9}{8} \times \frac{16}{9} \\ &= 2 \end{aligned}$$

3

$$\begin{aligned} & \frac{8}{9} \times \left(\frac{9}{4}\right)^2 \\ &= \frac{8}{9} \times \frac{81}{16} \\ &= \frac{9}{2} \end{aligned}$$

4

$$\begin{aligned} & \left(\frac{3}{2}\right)^2 \times \left(-\frac{20}{7}\right) \times \frac{7}{18} \\ &= \frac{9}{4} \times \left(-\frac{20}{7}\right) \times \frac{7}{18} \\ &= -\frac{5}{2} \end{aligned}$$

5

$$\begin{aligned} & -2^2 \times \frac{3}{20} \\ &= -4 \times \frac{3}{20} \\ &= -\frac{3}{5} \end{aligned}$$

6

$$\begin{aligned} & -\frac{13}{3} \times 3^3 \\ &= -\frac{13}{3} \times 27 \\ &= -117 \end{aligned}$$

7

$$\left(-\frac{9}{2}\right)^2 \times \left(\frac{8}{9}\right)^2$$

8

$$\left(-\frac{1}{20}\right) \times (-2^5) \times \left(-\frac{1}{2}\right)$$

9

$$10^2 \times \left(+\frac{9}{10}\right)$$

10

$$\frac{19}{9} \times (-2)^6 \times \frac{9}{8}$$

11

$$2^2 \times \frac{1}{20}$$

12

$$\left(+\frac{7}{15}\right) \times (-10^2) \times \left(-\frac{9}{5}\right)$$

7

$$\begin{aligned} & \left(-\frac{9}{2}\right)^2 \times \left(\frac{8}{9}\right)^2 \\ &= \frac{81}{4} \times \left(\frac{8}{9}\right)^2 \\ &= \frac{81}{4} \times \frac{64}{81} \\ &= 16 \end{aligned}$$

8

$$\begin{aligned} & \left(-\frac{1}{20}\right) \times (-2^5) \times \left(-\frac{1}{2}\right) \\ &= \left(-\frac{1}{20}\right) \times (-32) \times \left(-\frac{1}{2}\right) \\ &= -\frac{4}{5} \end{aligned}$$

9

$$\begin{aligned} & 10^2 \times \left(+\frac{9}{10}\right) \\ &= 100 \times \left(+\frac{9}{10}\right) \\ &= 90 \end{aligned}$$

10

$$\begin{aligned} & \frac{19}{9} \times (-2)^6 \times \frac{9}{8} \\ &= \frac{19}{9} \times 64 \times \frac{9}{8} \\ &= 152 \end{aligned}$$

11

$$\begin{aligned} & 2^2 \times \frac{1}{20} \\ &= 4 \times \frac{1}{20} \\ &= \frac{1}{5} \end{aligned}$$

12

$$\begin{aligned} & \left(+\frac{7}{15}\right) \times (-10^2) \times \left(-\frac{9}{5}\right) \\ &= \left(+\frac{7}{15}\right) \times (-100) \times \left(-\frac{9}{5}\right) \\ &= 84 \end{aligned}$$

13

$$\frac{3}{2} \times (-2)^5$$

14

$$(-6)^2 \times \left(\frac{5}{6}\right)^2$$

15

$$-\frac{13}{9} \times 3^3$$

16

$$\left(\frac{1}{2}\right)^2 \times 10$$

17

$$\left(-\frac{7}{8}\right)^2 \times (-2)^6$$

18

$$(-2)^3 \times \left(+\frac{5}{8}\right)$$

13

$$\begin{aligned} & \frac{3}{2} \times (-2)^5 \\ &= \frac{3}{2} \times (-32) \\ &= -48 \end{aligned}$$

14

$$\begin{aligned} & (-6)^2 \times \left(\frac{5}{6}\right)^2 \\ &= 36 \times \left(\frac{5}{6}\right)^2 \\ &= 36 \times \frac{25}{36} \\ &= 25 \end{aligned}$$

15

$$\begin{aligned} & -\frac{13}{9} \times 3^3 \\ &= -\frac{13}{9} \times 27 \\ &= -39 \end{aligned}$$

16

$$\begin{aligned} & \left(\frac{1}{2}\right)^2 \times 10 \\ &= \frac{1}{4} \times 10 \\ &= \frac{5}{2} \end{aligned}$$

17

$$\begin{aligned} & \left(-\frac{7}{8}\right)^2 \times (-2)^6 \\ &= \frac{49}{64} \times (-2)^6 \\ &= \frac{49}{64} \times 64 \\ &= 49 \end{aligned}$$

18

$$\begin{aligned} & (-2)^3 \times \left(+\frac{5}{8}\right) \\ &= -8 \times \left(+\frac{5}{8}\right) \\ &= -5 \end{aligned}$$

19

$$(-6)^2 \times \frac{5}{3}$$

20

$$2^2 \times 22$$

21

$$\left(\frac{1}{2}\right)^2 \times \frac{12}{5}$$

22

$$\left(+\frac{13}{18}\right) \times (-3)^3 \times \frac{16}{13}$$

23

$$\left(\frac{3}{8}\right)^2 \times \left(-\frac{16}{9}\right)$$

24

$$(-2)^5 \times \left(-\frac{9}{4}\right)^2$$

19

$$\begin{aligned} & (-6)^2 \times \frac{5}{3} \\ &= 36 \times \frac{5}{3} \\ &= 60 \end{aligned}$$

20

$$\begin{aligned} & 2^2 \times 22 \\ &= 4 \times 22 \\ &= 88 \end{aligned}$$

21

$$\begin{aligned} & \left(\frac{1}{2}\right)^2 \times \frac{12}{5} \\ &= \frac{1}{4} \times \frac{12}{5} \\ &= \frac{3}{5} \end{aligned}$$

22

$$\begin{aligned} & \left(+\frac{13}{18}\right) \times (-3)^3 \times \frac{16}{13} \\ &= \left(+\frac{13}{18}\right) \times (-27) \times \frac{16}{13} \\ &= -24 \end{aligned}$$

23

$$\begin{aligned} & \left(\frac{3}{8}\right)^2 \times \left(-\frac{16}{9}\right) \\ &= \frac{9}{64} \times \left(-\frac{16}{9}\right) \\ &= -\frac{1}{4} \end{aligned}$$

24

$$\begin{aligned} & (-2)^5 \times \left(-\frac{9}{4}\right)^2 \\ &= -32 \times \left(-\frac{9}{4}\right)^2 \\ &= -32 \times \frac{81}{16} \\ &= -162 \end{aligned}$$

25

$$(-2)^5 \times \frac{9}{2}$$

26

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

27

$$\left(+\frac{17}{16}\right) \times (-4)^2$$

28

$$\left(\frac{5}{9}\right)^2 \times (-9)^2$$

29

$$\left(-\frac{3}{2}\right)^2 \times \left(\frac{4}{3}\right)^2$$

30

$$-\frac{20}{17} \times \left(-\frac{17}{10}\right) \times 2^4$$

25

$$\begin{aligned}
 & (-2)^5 \times \frac{9}{2} \\
 &= -32 \times \frac{9}{2} \\
 &= -144
 \end{aligned}$$

26

$$\begin{aligned}
 & -2^3 \times (+8) \\
 &= -8 \times (+8) \\
 &= -64
 \end{aligned}$$

27

$$\begin{aligned}
 & \left(+\frac{17}{16}\right) \times (-4)^2 \\
 &= \left(+\frac{17}{16}\right) \times 16 \\
 &= 17
 \end{aligned}$$

28

$$\begin{aligned}
 & \left(\frac{5}{9}\right)^2 \times (-9)^2 \\
 &= \frac{25}{81} \times (-9)^2 \\
 &= \frac{25}{81} \times 81 \\
 &= 25
 \end{aligned}$$

29

$$\begin{aligned}
 & \left(-\frac{3}{2}\right)^2 \times \left(\frac{4}{3}\right)^2 \\
 &= \frac{9}{4} \times \left(\frac{4}{3}\right)^2 \\
 &= \frac{9}{4} \times \frac{16}{9} \\
 &= 4
 \end{aligned}$$

30

$$\begin{aligned}
 & -\frac{20}{17} \times \left(-\frac{17}{10}\right) \times 2^4 \\
 &= -\frac{20}{17} \times \left(-\frac{17}{10}\right) \times 16 \\
 &= 32
 \end{aligned}$$

①

$$(-2)^3 \times \left(-\frac{5}{8}\right)$$

②

$$(+24) \times \left(\frac{5}{2}\right)^2$$

③

$$(-2)^4 \times \left(-\frac{15}{16}\right)$$

④

$$(-5)^2 \times \left(\frac{1}{5}\right)^2$$

⑤

$$-\frac{2}{9} \times 3^4$$

⑥

$$\left(+\frac{5}{8}\right) \times \left(+\frac{17}{10}\right) \times (-4^2)$$

1

$$\begin{aligned} & (-2)^3 \times \left(-\frac{5}{8}\right) \\ &= -8 \times \left(-\frac{5}{8}\right) \\ &= 5 \end{aligned}$$

2

$$\begin{aligned} & (+24) \times \left(\frac{5}{2}\right)^2 \\ &= (+24) \times \frac{25}{4} \\ &= 150 \end{aligned}$$

3

$$\begin{aligned} & (-2)^4 \times \left(-\frac{15}{16}\right) \\ &= 16 \times \left(-\frac{15}{16}\right) \\ &= -15 \end{aligned}$$

4

$$\begin{aligned} & (-5)^2 \times \left(\frac{1}{5}\right)^2 \\ &= 25 \times \left(\frac{1}{5}\right)^2 \\ &= 25 \times \frac{1}{25} \\ &= 1 \end{aligned}$$

5

$$\begin{aligned} & -\frac{2}{9} \times 3^4 \\ &= -\frac{2}{9} \times 81 \\ &= -18 \end{aligned}$$

6

$$\begin{aligned} & \left(+\frac{5}{8}\right) \times \left(+\frac{17}{10}\right) \times (-4^2) \\ &= \left(+\frac{5}{8}\right) \times \left(+\frac{17}{10}\right) \times (-16) \\ &= -17 \end{aligned}$$

7

$$\frac{1}{9} \times (-3^4)$$

8

$$-\frac{3}{8} \times \left(-\frac{2}{3}\right)^2$$

9

$$(+10) \times \left(\frac{1}{10}\right)^2$$

10

$$(-2)^5 \times \left(-\frac{3}{4}\right)$$

11

$$\left(\frac{3}{2}\right)^2 \times \left(-\frac{2}{3}\right)^2$$

12

$$\left(-\frac{3}{4}\right)^2 \times \frac{16}{9}$$

7

$$\begin{aligned} & \frac{1}{9} \times (-3^4) \\ &= \frac{1}{9} \times (-81) \\ &= -9 \end{aligned}$$

8

$$\begin{aligned} & -\frac{3}{8} \times \left(-\frac{2}{3}\right)^2 \\ &= -\frac{3}{8} \times \frac{4}{9} \\ &= -\frac{1}{6} \end{aligned}$$

9

$$\begin{aligned} & (+10) \times \left(\frac{1}{10}\right)^2 \\ &= (+10) \times \frac{1}{100} \\ &= \frac{1}{10} \end{aligned}$$

10

$$\begin{aligned} & (-2)^5 \times \left(-\frac{3}{4}\right) \\ &= -32 \times \left(-\frac{3}{4}\right) \\ &= 24 \end{aligned}$$

11

$$\begin{aligned} & \left(\frac{3}{2}\right)^2 \times \left(-\frac{2}{3}\right)^2 \\ &= \frac{9}{4} \times \left(-\frac{2}{3}\right)^2 \\ &= \frac{9}{4} \times \frac{4}{9} \\ &= 1 \end{aligned}$$

12

$$\begin{aligned} & \left(-\frac{3}{4}\right)^2 \times \frac{16}{9} \\ &= \frac{9}{16} \times \frac{16}{9} \\ &= 1 \end{aligned}$$

13

$$\frac{1}{3} \times (-3)^3 \times \left(\frac{1}{2}\right)^2$$

14

$$\left(-\frac{17}{16}\right) \times (-4^2)$$

15

$$\left(-\frac{9}{2}\right)^2 \times (-2)^3$$

16

$$(-3^2) \times \frac{10}{3} \times \left(-\frac{18}{5}\right)$$

17

$$\left(+\frac{9}{8}\right) \times \left(\frac{4}{9}\right)^2$$

18

$$(-2)^2 \times \left(+\frac{13}{4}\right)$$

13

$$\begin{aligned}
 & \frac{1}{3} \times (-3)^3 \times \left(\frac{1}{2}\right)^2 \\
 &= \frac{1}{3} \times (-27) \times \left(\frac{1}{2}\right)^2 \\
 &= \frac{1}{3} \times (-27) \times \frac{1}{4} \\
 &= -\frac{9}{4}
 \end{aligned}$$

14

$$\begin{aligned}
 & \left(-\frac{17}{16}\right) \times (-4^2) \\
 &= \left(-\frac{17}{16}\right) \times (-16) \\
 &= 17
 \end{aligned}$$

15

$$\begin{aligned}
 & \left(-\frac{9}{2}\right)^2 \times (-2)^3 \\
 &= \frac{81}{4} \times (-2)^3 \\
 &= \frac{81}{4} \times (-8) \\
 &= -162
 \end{aligned}$$

16

$$\begin{aligned}
 & (-3^2) \times \frac{10}{3} \times \left(-\frac{18}{5}\right) \\
 &= -9 \times \frac{10}{3} \times \left(-\frac{18}{5}\right) \\
 &= 108
 \end{aligned}$$

17

$$\begin{aligned}
 & \left(+\frac{9}{8}\right) \times \left(\frac{4}{9}\right)^2 \\
 &= \left(+\frac{9}{8}\right) \times \frac{16}{81} \\
 &= \frac{2}{9}
 \end{aligned}$$

18

$$\begin{aligned}
 & (-2)^2 \times \left(+\frac{13}{4}\right) \\
 &= 4 \times \left(+\frac{13}{4}\right) \\
 &= 13
 \end{aligned}$$

19

$$(-6^2) \times \left(+\frac{3}{2}\right) \times \left(-\frac{1}{12}\right)$$

20

$$\left(-\frac{5}{9}\right) \times (-9)^2$$

21

$$\frac{5}{12} \times \left(\frac{6}{5}\right)^2$$

22

$$(-4)^2 \times \left(+\frac{5}{4}\right) \times \left(-\frac{7}{20}\right)$$

23

$$\left(-\frac{4}{3}\right)^2 \times (-9)^2$$

24

$$\left(+\frac{7}{20}\right) \times (-2^2)$$

19

$$\begin{aligned}
 & (-6^2) \times \left(+\frac{3}{2}\right) \times \left(-\frac{1}{12}\right) \\
 &= -36 \times \left(+\frac{3}{2}\right) \times \left(-\frac{1}{12}\right) \\
 &= \frac{9}{2}
 \end{aligned}$$

20

$$\begin{aligned}
 & \left(-\frac{5}{9}\right) \times (-9)^2 \\
 &= \left(-\frac{5}{9}\right) \times 81 \\
 &= -45
 \end{aligned}$$

21

$$\begin{aligned}
 & \frac{5}{12} \times \left(\frac{6}{5}\right)^2 \\
 &= \frac{5}{12} \times \frac{36}{25} \\
 &= \frac{3}{5}
 \end{aligned}$$

22

$$\begin{aligned}
 & (-4)^2 \times \left(+\frac{5}{4}\right) \times \left(-\frac{7}{20}\right) \\
 &= 16 \times \left(+\frac{5}{4}\right) \times \left(-\frac{7}{20}\right) \\
 &= -7
 \end{aligned}$$

23

$$\begin{aligned}
 & \left(-\frac{4}{3}\right)^2 \times (-9)^2 \\
 &= \frac{16}{9} \times (-9)^2 \\
 &= \frac{16}{9} \times 81 \\
 &= 144
 \end{aligned}$$

24

$$\begin{aligned}
 & \left(+\frac{7}{20}\right) \times (-2^2) \\
 &= \left(+\frac{7}{20}\right) \times (-4) \\
 &= -\frac{7}{5}
 \end{aligned}$$

25

$$\left(\frac{9}{4}\right)^2 \times (-4^2)$$

26

$$-8^2 \times \left(-\frac{1}{4}\right)$$

27

$$(+5) \times (-4^2)$$

28

$$2 \times 2^2$$

29

$$\frac{1}{10} \times (-2^2)$$

30

$$\left(-\frac{11}{5}\right) \times \left(+\frac{3}{4}\right) \times (-10)^2$$

25

$$\begin{aligned} & \left(\frac{9}{4}\right)^2 \times (-4^2) \\ &= \frac{81}{16} \times (-4^2) \\ &= \frac{81}{16} \times (-16) \\ &= -81 \end{aligned}$$

26

$$\begin{aligned} & -8^2 \times \left(-\frac{1}{4}\right) \\ &= -64 \times \left(-\frac{1}{4}\right) \\ &= 16 \end{aligned}$$

27

$$\begin{aligned} & (+5) \times (-4^2) \\ &= (+5) \times (-16) \\ &= -80 \end{aligned}$$

28

$$\begin{aligned} & 2 \times 2^2 \\ &= 2 \times 4 \\ &= 8 \end{aligned}$$

29

$$\begin{aligned} & \frac{1}{10} \times (-2^2) \\ &= \frac{1}{10} \times (-4) \\ &= -\frac{2}{5} \end{aligned}$$

30

$$\begin{aligned} & \left(-\frac{11}{5}\right) \times \left(+\frac{3}{4}\right) \times (-10)^2 \\ &= \left(-\frac{11}{5}\right) \times \left(+\frac{3}{4}\right) \times 100 \\ &= -165 \end{aligned}$$

①

$$\left(\frac{3}{2}\right)^2 \times \left(\frac{1}{3}\right)^2$$

②

$$(-2^5) \times \left(+\frac{19}{4}\right)$$

③

$$\left(\frac{3}{8}\right)^2 \times \left(-\frac{16}{3}\right)$$

④

$$-24 \times \left(-\frac{1}{2}\right)^2 \times \left(+\frac{13}{6}\right)$$

⑤

$$(-6)^2 \times \left(-\frac{1}{2}\right)^2$$

⑥

$$(-2)^2 \times 11$$

1

$$\begin{aligned} & \left(\frac{3}{2}\right)^2 \times \left(\frac{1}{3}\right)^2 \\ &= \frac{9}{4} \times \left(\frac{1}{3}\right)^2 \\ &= \frac{9}{4} \times \frac{1}{9} \\ &= \frac{1}{4} \end{aligned}$$

2

$$\begin{aligned} & (-2^5) \times \left(+\frac{19}{4}\right) \\ &= -32 \times \left(+\frac{19}{4}\right) \\ &= -152 \end{aligned}$$

3

$$\begin{aligned} & \left(\frac{3}{8}\right)^2 \times \left(-\frac{16}{3}\right) \\ &= \frac{9}{64} \times \left(-\frac{16}{3}\right) \\ &= -\frac{3}{4} \end{aligned}$$

4

$$\begin{aligned} & -24 \times \left(-\frac{1}{2}\right)^2 \times \left(+\frac{13}{6}\right) \\ &= -24 \times \frac{1}{4} \times \left(+\frac{13}{6}\right) \\ &= -13 \end{aligned}$$

5

$$\begin{aligned} & (-6)^2 \times \left(-\frac{1}{2}\right)^2 \\ &= 36 \times \left(-\frac{1}{2}\right)^2 \\ &= 36 \times \frac{1}{4} \\ &= 9 \end{aligned}$$

6

$$\begin{aligned} & (-2)^2 \times 11 \\ &= 4 \times 11 \\ &= 44 \end{aligned}$$

7

$$(+13) \times \left(\frac{1}{2}\right)^2 \times \frac{8}{13}$$

8

$$2^6 \times \frac{3}{4}$$

9

$$(-3^2) \times (+21)$$

10

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

11

$$-18 \times \left(\frac{7}{3}\right)^2$$

12

$$\left(-\frac{3}{8}\right) \times 2^2$$

7

$$\begin{aligned} & (+13) \times \left(\frac{1}{2}\right)^2 \times \frac{8}{13} \\ &= (+13) \times \frac{1}{4} \times \frac{8}{13} \\ &= 2 \end{aligned}$$

8

$$\begin{aligned} & 2^6 \times \frac{3}{4} \\ &= 64 \times \frac{3}{4} \\ &= 48 \end{aligned}$$

9

$$\begin{aligned} & (-3^2) \times (+21) \\ &= -9 \times (+21) \\ &= -189 \end{aligned}$$

10

$$\begin{aligned} & (-3^2) \times (+7) \\ &= -9 \times (+7) \\ &= -63 \end{aligned}$$

11

$$\begin{aligned} & -18 \times \left(\frac{7}{3}\right)^2 \\ &= -18 \times \frac{49}{9} \\ &= -98 \end{aligned}$$

12

$$\begin{aligned} & \left(-\frac{3}{8}\right) \times 2^2 \\ &= \left(-\frac{3}{8}\right) \times 4 \\ &= -\frac{3}{2} \end{aligned}$$

13

$$\frac{15}{7} \times (-7)^2$$

14

$$\left(-\frac{5}{2}\right)^2 \times \left(-\frac{4}{15}\right)$$

15

$$-2^5 \times \left(+\frac{19}{4}\right)$$

16

$$(-2^2) \times \left(-\frac{5}{18}\right) \times \frac{18}{5}$$

17

$$\frac{14}{9} \times 9^2$$

18

$$(-2^4) \times \left(-\frac{9}{2}\right)$$

13

$$\begin{aligned} & \frac{15}{7} \times (-7)^2 \\ &= \frac{15}{7} \times 49 \\ &= 105 \end{aligned}$$

14

$$\begin{aligned} & \left(-\frac{5}{2}\right)^2 \times \left(-\frac{4}{15}\right) \\ &= \frac{25}{4} \times \left(-\frac{4}{15}\right) \\ &= -\frac{5}{3} \end{aligned}$$

15

$$\begin{aligned} & -2^5 \times \left(+\frac{19}{4}\right) \\ &= -32 \times \left(+\frac{19}{4}\right) \\ &= -152 \end{aligned}$$

16

$$\begin{aligned} & (-2^2) \times \left(-\frac{5}{18}\right) \times \frac{18}{5} \\ &= -4 \times \left(-\frac{5}{18}\right) \times \frac{18}{5} \\ &= 4 \end{aligned}$$

17

$$\begin{aligned} & \frac{14}{9} \times 9^2 \\ &= \frac{14}{9} \times 81 \\ &= 126 \end{aligned}$$

18

$$\begin{aligned} & (-2^4) \times \left(-\frac{9}{2}\right) \\ &= -16 \times \left(-\frac{9}{2}\right) \\ &= 72 \end{aligned}$$

19

$$\frac{2}{17} \times (-2)^3 \times \left(+\frac{17}{2}\right)$$

20

$$-\frac{7}{12} \times (-6^2)$$

21

$$\frac{11}{4} \times \left(-\frac{2}{9}\right)^2 \times \left(+\frac{9}{11}\right)$$

22

$$\left(-\frac{5}{3}\right)^2 \times \left(+\frac{3}{10}\right)$$

23

$$-\frac{1}{10} \times 2^4 \times \frac{5}{7}$$

24

$$\left(-\frac{2}{7}\right)^2 \times \frac{13}{4} \times (-7)^2$$

19

$$\begin{aligned} & \frac{2}{17} \times (-2)^3 \times \left(+\frac{17}{2}\right) \\ &= \frac{2}{17} \times (-8) \times \left(+\frac{17}{2}\right) \\ &= -8 \end{aligned}$$

20

$$\begin{aligned} & -\frac{7}{12} \times (-6^2) \\ &= -\frac{7}{12} \times (-36) \\ &= 21 \end{aligned}$$

21

$$\begin{aligned} & \frac{11}{4} \times \left(-\frac{2}{9}\right)^2 \times \left(+\frac{9}{11}\right) \\ &= \frac{11}{4} \times \frac{4}{81} \times \left(+\frac{9}{11}\right) \\ &= \frac{1}{9} \end{aligned}$$

22

$$\begin{aligned} & \left(-\frac{5}{3}\right)^2 \times \left(+\frac{3}{10}\right) \\ &= \frac{25}{9} \times \left(+\frac{3}{10}\right) \\ &= \frac{5}{6} \end{aligned}$$

23

$$\begin{aligned} & -\frac{1}{10} \times 2^4 \times \frac{5}{7} \\ &= -\frac{1}{10} \times 16 \times \frac{5}{7} \\ &= -\frac{8}{7} \end{aligned}$$

24

$$\begin{aligned} & \left(-\frac{2}{7}\right)^2 \times \frac{13}{4} \times (-7)^2 \\ &= \frac{4}{49} \times \frac{13}{4} \times (-7)^2 \\ &= \frac{4}{49} \times \frac{13}{4} \times 49 \\ &= 13 \end{aligned}$$