中学受験新演習算数小5 〈計算補助教材〉

1　整数と小数のかけ算とわり算

1
(1)	5.2	(2)	16.8
(3)	9	(4)	7.2
(5)	126	(6)	28.8
(7)	54.4	(8)	76.8
(9)	126	(10)	8.4

解説

(2)
$$\begin{array}{r} 7 \\ \times\ 2.4 \\ \hline 2\ 8 \\ 1\ 4 \\ \hline 1\ 6.8 \end{array}$$

(3)
$$\begin{array}{r} 6 \\ \times\ 1.5 \\ \hline 3\ 0 \\ 6 \\ \hline 9.\cancel{0} \end{array}$$

(7)
$$\begin{array}{r} 1\ 7 \\ \times\ 3.2 \\ \hline 3\ 4 \\ 5\ 1 \\ \hline 5\ 4.4 \end{array}$$

(9)
$$\begin{array}{r} 4\ 5 \\ \times\ 2.8 \\ \hline 3\ 6\ 0 \\ 9\ 0 \\ \hline 1\ 2\ 6.\cancel{0} \end{array}$$

2
(1)	8.75	(2)	12.96
(3)	15.84	(4)	89.46
(5)	3.36	(6)	2.352
(7)	105.191	(8)	74.97
(9)	11.522	(10)	17.85

解説

(4)
$$\begin{array}{r} 2\ 1 \\ \times\ 4.2\ 6 \\ \hline 1\ 2\ 6 \\ 4\ 2 \\ 8\ 4 \\ \hline 8\ 9.4\ 6 \end{array}$$

(8)
$$\begin{array}{r} 3\ 5 \\ \times\ 2.1\ 4\ 2 \\ \hline 7\ 0 \\ 1\ 4\ 0 \\ 3\ 5 \\ 7\ 0 \\ \hline 7\ 4.9\ 7\ \cancel{0} \end{array}$$

3
(1)	5	(2)	2
(3)	5	(4)	40
(5)	4	(6)	15
(7)	20	(8)	50
(9)	25	(10)	36

解説

(2) $5 \div 2.5$
$\downarrow\quad\downarrow$
$50 \div 25 = 2$

(9) $30 \div 1.2$
$\downarrow\quad\downarrow$
$300 \div 12 = 25$

4
(1)	12	(2)	5
(3)	50	(4)	15
(5)	65	(6)	62
(7)	320	(8)	350
(9)	635	(10)	635

解説

(2) $4 \div 0.8$
$\downarrow\quad\downarrow$
$40 \div 8 = 5$

(8) $245 \div 0.7$
$\downarrow\quad\downarrow$
$2450 \div 7 = 350$

5
(1)	48	(2)	85
(3)	35	(4)	75
(5)	55	(6)	65
(7)	65	(8)	37.5
(9)	71.25	(10)	57.5

解説

(2) $119 \div 1.4$
$\downarrow\quad\downarrow$
$1190 \div 14 = 85$

(9) $228 \div 3.2$
$\downarrow\quad\downarrow$
$2280 \div 32 = 71.25$

2 小数と小数のかけ算

1
(1)	2.73	(2)	16.56
(3)	6.44	(4)	6.66
(5)	11.62	(6)	9.5
(7)	38.61	(8)	34.72
(9)	116.92	(10)	83.7

解説

(2)
```
      7.2
  ×  2.3
    2 1 6
  1 4 4
  1 6.5 6
```

(6)
```
      3.8
  ×  2.5
    1 9 0
    7 6
    9.5 0̸
```

2
(1)	2.94	(2)	1.92
(3)	2.96	(4)	1.41
(5)	8.72	(6)	9.85
(7)	1.84	(8)	0.76
(9)	6.35	(10)	14.8

解説

(8)
```
      0.2
  ×  3.8
    1 6
    6
    0.7 6
```

(10)
```
        0.8
  × 1 8.5
      4 0
    6 4
  8
  1 4.8 0̸
```

3
(1)	0.245	(2)	1.898
(3)	3.381	(4)	10.062
(5)	4.326	(6)	0.336
(7)	2.584	(8)	7.128
(9)	6.66	(10)	3.536

解説

(3)
```
    1 4.7
  × 0.2 3
    4 4 1
  2 9 4
  3.3 8 1
```

(5)
```
      4.2
  × 1.0 3
    1 2 6
  4 2
  4.3 2 6
```

(7)
```
      0.7 6
  ×    3.4
    3 0 4
  2 2 8
  2.5 8 4
```

(9)
```
      0.4 5
  × 1 4.8
    3 6 0
  1 8 0
  4 5
  6.6 6 0̸
```

4
(1)	9.0288	(2)	8.1096
(3)	3.2085	(4)	2.2631
(5)	0.3492	(6)	10.918
(7)	30.49634	(8)	4.68096
(9)	11.271912	(10)	1.788435

解説

(10)
```
        3.6 1 3  →3けた
  ×  0.4 9 5  →3けた
      1 8 0 6 5
    3 2 5 1 7
  1 4 4 5 2
  1.7 8 8 4 3 5  ←6けた
```

2

3 小数と小数のわり算

1
(1)	1.5	(2)	4.8
(3)	14	(4)	3.4
(5)	7.35	(6)	6.7
(7)	43.15	(8)	0.3
(9)	1.6	(10)	17.5

解説

(3)
```
       1 4
0、4)5、6
     4
     1 6
     1 6
        0
```

(5)
```
            7.3 5
4、2)3 0、8、7
       2 9 4
         1 4 7
         1 2 6
            2 1 0
            2 1 0
                0
```

2
(1)	3.3あまり0.21	(2)	8.4あまり0.08
(3)	2あまり0.2	(4)	2.5あまり0.15
(5)	4あまり0.1	(6)	3.2あまり0.36
(7)	7.1あまり0.64	(8)	14あまり0.03
(9)	299.1あまり0.016	(10)	64.4あまり0.024

解説

(2)
```
          8.4
3、8)3 2、0
     3 0 4
       1 6 0
       1 5 2
       0.0 8
```

(10)
```
             6 4.4
0、29)1 8、7 0
         1 7 4
           1 3 0
           1 1 6
             1 4 0
             1 1 6
             0.0 2 4
```

3
(1)	4.2あまり0.04	(2)	5.2あまり0.04
(3)	3.7あまり0.24	(4)	5.9あまり0.62
(5)	2.9あまり0.08	(6)	6.6あまり0.12
(7)	19.3あまり0.01	(8)	13.7あまり0.01
(9)	8.7あまり0.016	(10)	23あまり0.02

解説

(2)
```
          5.2
1、8)9、4
     9 0
       4 0
       3 6
     0.0 4
```

(10)
```
             2 3.0
0、36)8、3 0
         7 2
         1 1 0
         1 0 8
         0.0 2 0
```

4
(1)	3.7	(2)	3.7
(3)	9.6	(4)	5.7
(5)	4.6	(6)	0.39
(7)	0.71	(8)	0.58
(9)	3.8	(10)	7.0

解説

(2)
```
          3.7 0
2、4)8、9
     7 2
     1 7 0
     1 6 8
         2 0
```

(6)
```
              0.3 8 5
8、3)3、2 0
       2 4 9
         7 1 0
         6 6 4
           4 6 0
           4 1 5
             4 5
```

5
(1)	4.4	(2)	3.1
(3)	6.8	(4)	5.2
(5)	5.1	(6)	0.5
(7)	0.6	(8)	0.5
(9)	3.7	(10)	17.3

解説

(2)
```
          3.0 9
3、1)9、6
     9 3
       3 0 0
       2 7 9
         2 1
```

(9)
```
              3.6 6
1、72)6、3 0
         5 1 6
         1 1 4 0
         1 0 3 2
           1 0 8 0
           1 0 3 2
               4 8
```

4 約 分

1
(1) 1, 2, 3, 6
(2) 1, 3, 9
(3) 1, 2, 3, 6, 9, 18
(4) 1, 2, 3, 4, 6, 8, 12, 24
(5) 1, 2, 4, 5, 8, 10, 20, 40
(6) 1, 3, 19, 57
(7) 1, 5, 13, 65
(8) 1, 3, 29, 87
(9) 1, 3, 31, 93
(10) 1, 2, 4, 5, 10, 20, 25, 50, 100

解説 (6) $57 \div \boxed{1} = \boxed{57}$
$57 \div \boxed{3} = \boxed{19}$

└─ 57の約数

2
(1) 1, 2   (2) 1, 2
(3) 1, 2, 3, 6   (4) 1, 7
(5) 1, 3   (6) 1, 2
(7) 1, 2, 4   (8) 1, 3
(9) 1, 2, 5, 10   (10) 1, 2, 3, 6

解説 (1)〜(4)
　小さいほうの整数の約数の中から，大きいほうの整数の約数になっているものを見つける。

(5)〜(10)
　もっとも小さい整数の約数の中から，残りの2つの整数の約数になっているものを見つける。

3
(1) 4   (2) 8
(3) 3   (4) 6
(5) 4   (6) 9
(7) 12   (8) 5
(9) 40   (10) 25

解説 公約数の中で，もっとも大きい整数を見つける。

4
(1) $\dfrac{1}{2}$ (2) $\dfrac{1}{3}$ (3) $\dfrac{1}{4}$

(4) $\dfrac{1}{3}$ (5) $\dfrac{1}{5}$ (6) $\dfrac{1}{3}$

(7) $\dfrac{1}{2}$ (8) $\dfrac{1}{3}$ (9) $\dfrac{1}{6}$

(10) $\dfrac{1}{14}$

解説 (2) $\dfrac{\overset{1}{\cancel{2}}}{\underset{3}{\cancel{6}}} = \dfrac{1}{3}$ (5) $\dfrac{\overset{1}{\cancel{2}}}{\underset{5}{\cancel{10}}} = \dfrac{1}{5}$

5
(1) $\dfrac{4}{5}$ (2) $\dfrac{2}{3}$ (3) $\dfrac{2}{3}$

(4) $\dfrac{2}{3}$ (5) $\dfrac{5}{8}$ (6) $\dfrac{3}{4}$

(7) $\dfrac{4}{7}$ (8) $\dfrac{5}{6}$ (9) $\dfrac{7}{8}$

(10) $\dfrac{3}{4}$

解説 (5) $\dfrac{\overset{5}{\cancel{15}}}{\underset{8}{\cancel{24}}} = \dfrac{5}{8}$ (7) $\dfrac{\overset{4}{\cancel{16}}}{\underset{7}{\cancel{28}}} = \dfrac{4}{7}$

5 通 分

1
(1) 2, 4, 6		(2) 4, 8, 12
(3) 5, 10, 15		(4) 11, 22, 33
(5) 13, 26, 39		(6) 18, 36, 54
(7) 22, 44, 66		(8) 25, 50, 75
(9) 30, 60, 90		(10) 50,100,150

解説 1, 2, 3 を順にかける。

2
(1) 20, 40, 60	(2) 12, 24, 36
(3) 18, 36, 54	(4) 30, 60, 90
(5) 56, 112, 168	(6) 40, 80, 120
(7) 16, 32, 48	(8) 36, 72, 108
(9) 90, 180, 270	(10) 80, 160, 240

解説 大きいほうの整数の倍数を書き出して、その中から小さいほうの整数の倍数を見つける。

3
(1) 14	(2) 24
(3) 12	(4) 45
(5) 30	(6) 48
(7) 12	(8) 60
(9) 36	(10) 180

解説 公倍数の中で、もっとも小さい整数を見つける。

4

(1) $\dfrac{4}{12}$, $\dfrac{9}{12}$ (2) $\dfrac{9}{12}$, $\dfrac{2}{12}$

(3) $\dfrac{12}{30}$, $\dfrac{5}{30}$ (4) $\dfrac{15}{18}$, $\dfrac{14}{18}$

(5) $\dfrac{35}{45}$, $\dfrac{24}{45}$ (6) $\dfrac{42}{60}$, $\dfrac{25}{60}$

(7) $\dfrac{6}{12}$, $\dfrac{8}{12}$, $\dfrac{3}{12}$ (8) $\dfrac{27}{36}$, $\dfrac{30}{36}$, $\dfrac{28}{36}$

(9) $\dfrac{220}{240}$, $\dfrac{135}{240}$, $\dfrac{204}{240}$ (10) $\dfrac{78}{180}$, $\dfrac{76}{180}$, $\dfrac{69}{180}$

解説

(3) $\dfrac{2}{5} = \dfrac{12}{30}$, $\dfrac{1}{6} = \dfrac{5}{30}$

(8) $\dfrac{3}{4} = \dfrac{27}{36}$, $\dfrac{5}{6} = \dfrac{30}{36}$, $\dfrac{7}{9} = \dfrac{28}{36}$

5

(1) $\dfrac{3}{4}$, $\dfrac{2}{3}$ (2) $\dfrac{3}{4}$, $\dfrac{3}{5}$

(3) $\dfrac{5}{8}$, $\dfrac{3}{5}$ (4) $\dfrac{7}{8}$, $\dfrac{5}{6}$

(5) $\dfrac{11}{15}$, $\dfrac{7}{12}$ (6) $\dfrac{17}{24}$, $\dfrac{9}{16}$

(7) $\dfrac{1}{2}$, $\dfrac{2}{5}$, $\dfrac{1}{3}$ (8) $\dfrac{5}{6}$, $\dfrac{11}{15}$, $\dfrac{7}{10}$

(9) $\dfrac{19}{20}$, $\dfrac{11}{12}$, $\dfrac{8}{9}$ (10) $\dfrac{13}{20}$, $\dfrac{7}{12}$, $\dfrac{8}{15}$

解説 分母がちがう分数の大きさをくらべるときは、通分して、分母が同じ分数にしてくらべる。

(2) $\dfrac{3}{4} = \dfrac{15}{20}$, $\dfrac{3}{5} = \dfrac{12}{20}$

(10) $\dfrac{7}{12} = \dfrac{35}{60}$, $\dfrac{8}{15} = \dfrac{32}{60}$, $\dfrac{13}{20} = \dfrac{39}{60}$

6　分数のたし算とひき算(1)

1

(1) $\dfrac{11}{15}$ 　　(2) $1\dfrac{1}{6}$ 　　(3) $\dfrac{17}{20}$

(4) $\dfrac{15}{28}$ 　　(5) $\dfrac{31}{35}$ 　　(6) $\dfrac{23}{30}$

(7) $\dfrac{39}{56}$ 　　(8) $\dfrac{55}{63}$ 　　(9) $\dfrac{31}{36}$

(10) $1\dfrac{13}{90}$

解説

(2) $\dfrac{1}{2}+\dfrac{2}{3}$ 　　　　(5) $\dfrac{3}{5}+\dfrac{2}{7}$

$=\dfrac{3}{6}+\dfrac{4}{6}$ 　　　　$=\dfrac{21}{35}+\dfrac{10}{35}$

$=\dfrac{7}{6}=1\dfrac{1}{6}$ 　　　$=\dfrac{31}{35}$

2

(1) $\dfrac{1}{6}$ 　　(2) $\dfrac{5}{12}$ 　　(3) $\dfrac{1}{20}$

(4) $\dfrac{6}{35}$ 　　(5) $\dfrac{29}{72}$ 　　(6) $\dfrac{7}{24}$

(7) $\dfrac{7}{40}$ 　　(8) $\dfrac{2}{45}$ 　　(9) $\dfrac{23}{24}$

(10) $\dfrac{9}{70}$

解説

(2) $\dfrac{3}{4}-\dfrac{1}{3}$ 　　　　(9) $\dfrac{11}{8}-\dfrac{5}{12}$

$=\dfrac{9}{12}-\dfrac{4}{12}$ 　　　$=\dfrac{33}{24}-\dfrac{10}{24}$

$=\dfrac{5}{12}$ 　　　　$=\dfrac{23}{24}$

3

(1) $1\dfrac{1}{3}$ 　　(2) $\dfrac{5}{6}$ 　　(3) $\dfrac{5}{9}$

(4) $\dfrac{3}{5}$ 　　(5) $\dfrac{4}{5}$ 　　(6) $\dfrac{3}{5}$

(7) $1\dfrac{1}{7}$ 　　(8) $1\dfrac{1}{6}$ 　　(9) $\dfrac{5}{6}$

(10) $\dfrac{7}{8}$

解説

(3) $\dfrac{1}{6}+\dfrac{7}{18}$ 　　　　(8) $\dfrac{3}{10}+\dfrac{13}{15}$

$=\dfrac{3}{18}+\dfrac{7}{18}$ 　　　$=\dfrac{9}{30}+\dfrac{26}{30}$

$=\dfrac{10}{18}$ 　　　　$=\dfrac{35}{30}$

$=\dfrac{5}{9}$ 　　　　$=\dfrac{7}{6}=1\dfrac{1}{6}$

4

(1) $\dfrac{1}{3}$ 　　(2) $\dfrac{1}{6}$ 　　(3) $\dfrac{4}{9}$

(4) $\dfrac{1}{10}$ 　　(5) $\dfrac{1}{5}$ 　　(6) $\dfrac{3}{5}$

(7) $\dfrac{1}{7}$ 　　(8) $\dfrac{1}{2}$ 　　(9) $\dfrac{1}{2}$

(10) $1\dfrac{4}{9}$

解説

(2) $\dfrac{11}{12}-\dfrac{3}{4}$ 　　　　(6) $\dfrac{5}{6}-\dfrac{7}{30}$

$=\dfrac{11}{12}-\dfrac{9}{12}$ 　　　$=\dfrac{25}{30}-\dfrac{7}{30}$

$=\dfrac{2}{12}=\dfrac{1}{6}$ 　　　$=\dfrac{18}{30}=\dfrac{3}{5}$

7　分数のたし算とひき算(2)

1

(1)　$\dfrac{7}{3}$　　　(2)　$\dfrac{11}{3}$　　　(3)　$\dfrac{7}{5}$

(4)　$\dfrac{25}{6}$　　(5)　4　　　(6)　7

(7)　$2\dfrac{2}{3}$　　(8)　$4\dfrac{3}{5}$　　(9)　$4\dfrac{1}{6}$

(10)　$4\dfrac{3}{8}$

解説

(2)　1は$\dfrac{1}{3}$の3こぶんなので，3は$\dfrac{1}{3}$の
3×3こぶん。9＋2＝11より，
$3\dfrac{2}{3}$は$\dfrac{1}{3}$の11こぶんで，$\dfrac{11}{3}$

(8)　$\dfrac{23}{5}$には$\dfrac{5}{5}$（＝1）が23÷5＝4こ
ぶんで，あまりが3なので，
$\dfrac{23}{5}=4+\dfrac{3}{5}=4\dfrac{3}{5}$

2

(1)　$3\dfrac{5}{6}$　　(2)　$4\dfrac{17}{20}$　　(3)　$4\dfrac{7}{12}$

(4)　$5\dfrac{15}{28}$　(5)　$5\dfrac{5}{12}$　　(6)　$8\dfrac{5}{24}$

(7)　$7\dfrac{5}{18}$　(8)　$8\dfrac{7}{36}$　　(9)　$10\dfrac{11}{24}$

(10)　$7\dfrac{7}{60}$

解説

(7)　$4\dfrac{4}{9}+2\dfrac{5}{6}$

$=4\dfrac{8}{18}+2\dfrac{15}{18}$

$=4+2+\dfrac{8}{18}+\dfrac{15}{18}$

$=6+\dfrac{23}{18}$

$=6+1\dfrac{5}{18}$

$=7\dfrac{5}{18}$

3

(1)　$2\dfrac{5}{12}$　　(2)　$\dfrac{1}{10}$　　(3)　$2\dfrac{1}{18}$

(4)　$3\dfrac{11}{24}$　(5)　$5\dfrac{13}{40}$　(6)　$4\dfrac{23}{36}$

(7)　$2\dfrac{11}{18}$　(8)　$2\dfrac{5}{12}$　(9)　$1\dfrac{29}{30}$

(10)　$3\dfrac{7}{12}$

解説

(10)　$8\dfrac{9}{20}-4\dfrac{13}{15}$

$=8\dfrac{27}{60}-4\dfrac{52}{60}$

$=7\dfrac{87}{60}-4\dfrac{52}{60}$

$=3\dfrac{\overset{7}{35}}{\underset{12}{60}}=3\dfrac{7}{12}$

4

(1)　$3\dfrac{1}{12}$　　(2)　$6\dfrac{37}{40}$　　(3)　$2\dfrac{19}{30}$

(4)　$7\dfrac{11}{24}$　(5)　$4\dfrac{7}{30}$　　(6)　$2\dfrac{2}{3}$

(7)　$2\dfrac{1}{12}$　(8)　$1\dfrac{11}{12}$　(9)　$1\dfrac{1}{10}$

(10)　$1\dfrac{1}{8}$

解説

(2)　$2\dfrac{3}{5}+1\dfrac{7}{10}+2\dfrac{5}{8}$

$=2\dfrac{24}{40}+1\dfrac{28}{40}+2\dfrac{25}{40}$

$=5+\dfrac{77}{40}$

$=5+1\dfrac{37}{40}$

$=6\dfrac{37}{40}$

8 分数と小数のたし算とひき算

1

(1)	0.4	(2)	0.625	(3)	1.75
(4)	2.7	(5)	1.28	(6)	3
(7)	2.8	(8)	4.75	(9)	1.375
(10)	4				

解説

(2) $\dfrac{5}{8} = 5 \div 8 = 0.625$

(5) $1\dfrac{7}{25} = 1 + \dfrac{7}{25}$

$= 1 + 7 \div 25 = 1 + 0.28 = 1.28$

(8) $\dfrac{19}{4} = 19 \div 4 = 4.75$

2

(1)	$\dfrac{9}{10}$	(2)	$1\dfrac{3}{5}$	(3)	$\dfrac{29}{100}$
(4)	$2\dfrac{17}{100}$	(5)	$\dfrac{2}{5}$	(6)	$3\dfrac{2}{5}$
(7)	$\dfrac{12}{25}$	(8)	$2\dfrac{17}{25}$	(9)	$\dfrac{4}{1}$
(10)	$1\dfrac{29}{40}$				

解説

(7) $0.48 = \dfrac{\overset{12}{\cancel{48}}}{\underset{25}{\cancel{100}}} = \dfrac{12}{25}$

(10) $1.725 = 1 + 0.725$

$= 1 + \dfrac{\overset{29}{\overset{145}{\cancel{725}}}}{\underset{40}{\underset{200}{\cancel{1000}}}} = 1\dfrac{29}{40}$

3

(1)	$\dfrac{11}{15}$	(2)	$\dfrac{9}{20}$	(3)	$\dfrac{69}{70}$
(4)	$\dfrac{7}{10}$	(5)	$\dfrac{131}{200}$	(6)	$\dfrac{19}{70}$
(7)	$\dfrac{1}{20}$	(8)	$\dfrac{7}{30}$	(9)	$\dfrac{79}{300}$
(10)	$\dfrac{143}{180}$				

解説

(5) $0.28 + \dfrac{3}{8}$

$= \dfrac{7}{25} + \dfrac{3}{8}$

$= \dfrac{56}{200} + \dfrac{75}{200}$

$= \dfrac{131}{200}$

(9) $0.43 - \dfrac{1}{6}$

$= \dfrac{43}{100} - \dfrac{1}{6}$

$= \dfrac{129}{300} - \dfrac{50}{300}$

$= \dfrac{79}{300}$

4

(1)	$1\dfrac{1}{20}$	(2)	$\dfrac{53}{60}$	(3)	$\dfrac{41}{60}$
(4)	$\dfrac{59}{60}$	(5)	$\dfrac{37}{280}$	(6)	$\dfrac{259}{900}$
(7)	$1\dfrac{7}{12}$	(8)	$1\dfrac{7}{600}$	(9)	$\dfrac{176}{225}$
(10)	$\dfrac{37}{100}$				

解説

(5) $\dfrac{6}{7} + \dfrac{3}{8} - 1.1 = \dfrac{6}{7} + \dfrac{3}{8} - \dfrac{11}{10}$

$= \dfrac{240}{280} + \dfrac{105}{280} - \dfrac{308}{280}$

$= \dfrac{37}{280}$

9 分数と整数のかけ算

1

(1) $1\dfrac{1}{3}$ (2) $3\dfrac{3}{4}$ (3) $6\dfrac{2}{5}$

(4) $4\dfrac{1}{6}$ (5) $3\dfrac{3}{7}$ (6) $4\dfrac{3}{8}$

(7) $6\dfrac{2}{9}$ (8) $2\dfrac{1}{10}$ (9) $2\dfrac{11}{12}$

(10) $3\dfrac{11}{15}$

解説

(2) $\dfrac{3}{4} \times 5 = \dfrac{3 \times 5}{4} = \dfrac{15}{4} = 3\dfrac{3}{4}$

(10) $\dfrac{8}{15} \times 7 = \dfrac{8 \times 7}{15} = \dfrac{56}{15} = 3\dfrac{11}{15}$

2

(1) $5\dfrac{1}{7}$ (2) $6\dfrac{7}{8}$ (3) $5\dfrac{17}{20}$

(4) $6\dfrac{2}{9}$ (5) $7\dfrac{7}{12}$ (6) $13\dfrac{1}{8}$

(7) $6\dfrac{9}{16}$ (8) $14\dfrac{7}{13}$ (9) $18\dfrac{2}{11}$

(10) $8\dfrac{8}{15}$

解説

(2) $\dfrac{5}{8} \times 11 = \dfrac{5 \times 11}{8} = \dfrac{55}{8} = 6\dfrac{7}{8}$

(5) $\dfrac{7}{12} \times 13 = \dfrac{7 \times 13}{12} = \dfrac{91}{12} = 7\dfrac{7}{12}$

3

(1) $4\dfrac{1}{2}$ (2) $6\dfrac{2}{3}$ (3) $4\dfrac{1}{5}$

(4) $3\dfrac{1}{2}$ (5) $4\dfrac{2}{3}$ (6) $4\dfrac{1}{6}$

(7) $6\dfrac{2}{5}$ (8) $19\dfrac{1}{2}$ (9) $10\dfrac{2}{5}$

(10) $8\dfrac{2}{3}$

解説

(3) $\dfrac{7}{15} \times 9 = \dfrac{7 \times \overset{3}{\cancel{9}}}{\underset{5}{\cancel{15}}} = \dfrac{21}{5} = 4\dfrac{1}{5}$

(6) $\dfrac{5}{12} \times 10 = \dfrac{5 \times \overset{5}{\cancel{10}}}{\underset{6}{\cancel{12}}} = \dfrac{25}{6} = 4\dfrac{1}{6}$

4

(1) $5\dfrac{1}{7}$ (2) $7\dfrac{4}{5}$ (3) $7\dfrac{2}{9}$

(4) $13\dfrac{1}{8}$ (5) $9\dfrac{1}{3}$ (6) $11\dfrac{1}{3}$

(7) $9\dfrac{1}{2}$ (8) $30\dfrac{2}{3}$ (9) $24\dfrac{2}{3}$

(10) $8\dfrac{1}{3}$

解説

(2) $2\dfrac{3}{5} \times 3 = \dfrac{13 \times 3}{5} = \dfrac{39}{5} = 7\dfrac{4}{5}$

(7) $2\dfrac{3}{8} \times 4 = \dfrac{19 \times \overset{1}{\cancel{4}}}{\underset{2}{\cancel{8}}} = \dfrac{19}{2} = 9\dfrac{1}{2}$

10 分数と整数のわり算

1

(1) $\dfrac{3}{20}$　　(2) $\dfrac{3}{20}$　　(3) $\dfrac{2}{21}$

(4) $\dfrac{5}{48}$　　(5) $\dfrac{5}{54}$　　(6) $\dfrac{3}{70}$

(7) $\dfrac{11}{48}$　　(8) $\dfrac{8}{45}$　　(9) $\dfrac{13}{45}$

(10) $\dfrac{5}{64}$

解説

(2) $\dfrac{3}{5} \div 4 = \dfrac{3}{5 \times 4} = \dfrac{3}{20}$

(4) $\dfrac{5}{8} \div 6 = \dfrac{5}{8 \times 6} = \dfrac{5}{48}$

2

(1) $\dfrac{2}{45}$　　(2) $\dfrac{2}{39}$　　(3) $\dfrac{4}{77}$

(4) $\dfrac{7}{88}$　　(5) $\dfrac{9}{100}$　　(6) $\dfrac{8}{135}$

(7) $\dfrac{8}{195}$　　(8) $\dfrac{7}{121}$　　(9) $\dfrac{9}{140}$

(10) $\dfrac{3}{128}$

解説

(5) $\dfrac{9}{10} \div 10 = \dfrac{9}{10 \times 10} = \dfrac{9}{100}$

(8) $\dfrac{7}{11} \div 11 = \dfrac{7}{11 \times 11} = \dfrac{7}{121}$

3

(1) $\dfrac{1}{16}$　　(2) $\dfrac{1}{10}$　　(3) $\dfrac{1}{10}$

(4) $\dfrac{2}{27}$　　(5) $\dfrac{3}{40}$　　(6) $\dfrac{2}{21}$

(7) $\dfrac{3}{70}$　　(8) $\dfrac{3}{32}$　　(9) $\dfrac{2}{45}$

(10) $\dfrac{1}{26}$

解説

(4) $\dfrac{4}{9} \div 6 = \dfrac{\overset{2}{\cancel{4}}}{9 \times \underset{3}{\cancel{6}}} = \dfrac{2}{27}$

(8) $\dfrac{15}{16} \div 10 = \dfrac{\overset{3}{\cancel{15}}}{16 \times \underset{2}{\cancel{10}}} = \dfrac{3}{32}$

4

(1) $\dfrac{7}{24}$　　(2) $\dfrac{2}{7}$　　(3) $\dfrac{14}{15}$

(4) $\dfrac{5}{18}$　　(5) $\dfrac{5}{16}$　　(6) $\dfrac{3}{10}$

(7) $\dfrac{2}{7}$　　(8) $\dfrac{11}{36}$　　(9) $1\dfrac{1}{6}$

(10) $\dfrac{3}{4}$

解説

(4) $4\dfrac{1}{6} \div 15 = \dfrac{\overset{5}{\cancel{25}}}{6 \times \underset{3}{\cancel{15}}} = \dfrac{5}{18}$

(8) $4\dfrac{7}{12} \div 15 = \dfrac{\overset{11}{\cancel{55}}}{12 \times \underset{3}{\cancel{15}}} = \dfrac{11}{36}$

11 分数と分数のかけ算

1

(1) $\dfrac{3}{8}$ 　　(2) $\dfrac{4}{15}$ 　　(3) $\dfrac{5}{42}$

(4) $\dfrac{35}{54}$ 　　(5) $\dfrac{5}{72}$ 　　(6) $\dfrac{20}{21}$

(7) $1\dfrac{11}{24}$ 　　(8) $\dfrac{27}{28}$ 　　(9) $\dfrac{27}{32}$

(10) $4\dfrac{3}{8}$

解説

(2) $\dfrac{4}{5}\times\dfrac{1}{3}=\dfrac{4\times1}{5\times3}=\dfrac{4}{15}$

(7) $\dfrac{7}{4}\times\dfrac{5}{6}=\dfrac{7\times5}{4\times6}=\dfrac{35}{24}=1\dfrac{11}{24}$

2

(1) $\dfrac{3}{10}$ 　　(2) $\dfrac{2}{21}$ 　　(3) $\dfrac{3}{10}$

(4) $\dfrac{5}{18}$ 　　(5) $\dfrac{7}{10}$ 　　(6) $\dfrac{1}{4}$

(7) $\dfrac{3}{5}$ 　　(8) $\dfrac{1}{6}$ 　　(9) $1\dfrac{1}{5}$

(10) $7\dfrac{1}{2}$

解説

(2) $\dfrac{4}{7}\times\dfrac{1}{6}=\dfrac{\overset{2}{4}\times1}{7\times\underset{3}{6}}=\dfrac{2}{21}$

(8) $\dfrac{5}{8}\times\dfrac{4}{15}=\dfrac{\overset{1}{5}\times\overset{1}{4}}{\underset{2}{8}\times\underset{3}{15}}=\dfrac{1}{6}$

3

(1) $1\dfrac{1}{15}$ 　　(2) $1\dfrac{13}{20}$ 　　(3) $\dfrac{24}{35}$

(4) $1\dfrac{1}{6}$ 　　(5) $1\dfrac{13}{32}$ 　　(6) $3\dfrac{8}{9}$

(7) $4\dfrac{7}{12}$ 　　(8) $3\dfrac{1}{21}$ 　　(9) $6\dfrac{9}{16}$

(10) $10\dfrac{1}{12}$

解説

(2) $2\dfrac{3}{4}\times\dfrac{3}{5}=\dfrac{11}{4}\times\dfrac{3}{5}=\dfrac{33}{20}=1\dfrac{13}{20}$

(7) $2\dfrac{1}{2}\times1\dfrac{5}{6}=\dfrac{5}{2}\times\dfrac{11}{6}=\dfrac{55}{12}=4\dfrac{7}{12}$

4

(1) $1\dfrac{1}{2}$ 　　(2) $1\dfrac{1}{5}$ 　　(3) $\dfrac{5}{7}$

(4) $1\dfrac{1}{10}$ 　　(5) 6 　　(6) 4

(7) $3\dfrac{2}{3}$ 　　(8) 8 　　(9) $3\dfrac{3}{4}$

(10) $1\dfrac{1}{2}$

解説

(2) $1\dfrac{3}{5}\times\dfrac{3}{4}=\dfrac{8}{5}\times\dfrac{3}{4}=\dfrac{\overset{2}{8}\times3}{5\times\underset{1}{4}}=\dfrac{6}{5}=1\dfrac{1}{5}$

(10) $1\dfrac{3}{7}\times1\dfrac{1}{20}=\dfrac{10}{7}\times\dfrac{21}{20}$

$=\dfrac{\overset{1}{10}\times\overset{3}{21}}{\underset{1}{7}\times\underset{2}{20}}=\dfrac{3}{2}=1\dfrac{1}{2}$

12 分数と分数のわり算

1

(1) $\dfrac{9}{10}$ (2) $1\dfrac{1}{15}$ (3) $1\dfrac{7}{18}$

(4) $4\dfrac{1}{6}$ (5) $\dfrac{15}{16}$ (6) $\dfrac{35}{54}$

(7) $\dfrac{35}{64}$ (8) $1\dfrac{7}{20}$ (9) $1\dfrac{11}{49}$

(10) $1\dfrac{5}{72}$

解説

(2) $\dfrac{4}{5} \div \dfrac{3}{4} = \dfrac{4}{5} \times \dfrac{4}{3} = \dfrac{16}{15} = 1\dfrac{1}{15}$

(9) $\dfrac{10}{7} \div \dfrac{7}{6} = \dfrac{10}{7} \times \dfrac{6}{7} = \dfrac{60}{49} = 1\dfrac{11}{49}$

2

(1) $\dfrac{4}{7}$ (2) $\dfrac{9}{10}$ (3) $\dfrac{6}{7}$

(4) $\dfrac{2}{3}$ (5) $1\dfrac{1}{2}$ (6) $\dfrac{3}{4}$

(7) $5\dfrac{1}{4}$ (8) $1\dfrac{1}{2}$ (9) $\dfrac{3}{4}$

(10) $1\dfrac{1}{5}$

解説

(2) $\dfrac{3}{4} \div \dfrac{5}{6} = \dfrac{3}{\overset{2}{\cancel{4}}} \times \dfrac{\overset{3}{\cancel{6}}}{5} = \dfrac{9}{10}$

(10) $\dfrac{9}{7} \div \dfrac{15}{14} = \dfrac{\overset{3}{\cancel{9}}}{\underset{1}{\cancel{7}}} \times \dfrac{\overset{2}{\cancel{14}}}{\underset{5}{\cancel{15}}} = \dfrac{6}{5} = 1\dfrac{1}{5}$

3

(1) $1\dfrac{11}{24}$ (2) $\dfrac{35}{36}$ (3) $1\dfrac{21}{155}$

(4) $2\dfrac{17}{64}$ (5) $1\dfrac{61}{104}$ (6) $1\dfrac{11}{15}$

(7) $2\dfrac{33}{56}$ (8) $1\dfrac{23}{40}$ (9) $2\dfrac{48}{95}$

(10) $1\dfrac{7}{20}$

解説

(3) $4\dfrac{2}{5} \div 3\dfrac{7}{8} = \dfrac{22}{5} \div \dfrac{31}{8}$

$= \dfrac{22}{5} \times \dfrac{8}{31} = \dfrac{176}{155} = 1\dfrac{21}{155}$

4

(1) $\dfrac{9}{14}$ (2) $1\dfrac{7}{17}$ (3) $2\dfrac{14}{51}$

(4) $1\dfrac{9}{14}$ (5) $1\dfrac{13}{22}$ (6) $1\dfrac{1}{20}$

(7) 3 (8) $2\dfrac{4}{5}$ (9) $\dfrac{19}{33}$

(10) $\dfrac{18}{19}$

解説

(9) $4\dfrac{2}{9} \div 7\dfrac{1}{3} = \dfrac{38}{9} \div \dfrac{22}{3}$

$= \dfrac{\overset{19}{\cancel{38}}}{\underset{3}{\cancel{9}}} \times \dfrac{\overset{1}{\cancel{3}}}{\underset{11}{\cancel{22}}} = \dfrac{19}{33}$

13 分数と小数のかけ算とわり算

1

(1) $\dfrac{7}{18}$　　(2) $\dfrac{8}{15}$　　(3) $\dfrac{6}{25}$

(4) $\dfrac{1}{5}$　　(5) $\dfrac{1}{5}$　　(6) $\dfrac{2}{25}$

(7) $\dfrac{9}{50}$　　(8) $\dfrac{1}{5}$　　(9) $\dfrac{4}{25}$

(10) $\dfrac{9}{50}$

解説

(5) $0.48 \times \dfrac{5}{12} = \dfrac{\overset{\overset{1}{\cancel{4}}}{\cancel{48}}}{\underset{\underset{5}{\cancel{20}}}{\cancel{100}}} \times \dfrac{\overset{1}{\cancel{5}}}{\underset{1}{\cancel{12}}} = \dfrac{1}{5}$

(9) $\dfrac{5}{8} \times 0.256 = \dfrac{5}{8} \times \dfrac{\overset{\overset{4}{\cancel{32}}}{\cancel{256}}}{\underset{\underset{25}{\cancel{200}}}{\cancel{1000}}} = \dfrac{4}{25}$

2

(1) 2　　(2) $6\dfrac{3}{10}$　　(3) $15\dfrac{3}{10}$

(4) $1\dfrac{33}{100}$　　(5) $7\dfrac{1}{25}$　　(6) 2

(7) $13\dfrac{11}{25}$　　(8) $10\dfrac{2}{5}$　　(9) $13\dfrac{3}{4}$

(10) 5

解説

(4) $2\dfrac{8}{15} \times 0.525 = \dfrac{\overset{19}{\cancel{38}}}{\underset{1}{\cancel{15}}} \times \dfrac{\overset{\overset{7}{\cancel{35}}}{\cancel{525}}}{\underset{\underset{100}{\cancel{200}}}{\cancel{1000}}}$

$= \dfrac{133}{100} = 1\dfrac{33}{100}$

(10) $1.125 \times 4\dfrac{4}{9} = \dfrac{\overset{\overset{5}{\cancel{125}}}{\cancel{1125}}}{\underset{\underset{1}{\cancel{25}}}{\cancel{1000}}} \times \dfrac{\overset{1}{\cancel{40}}}{\underset{1}{\cancel{9}}} = 5$

3

(1) $1\dfrac{1}{4}$　　(2) $\dfrac{5}{8}$　　(3) $\dfrac{5}{6}$

(4) $\dfrac{5}{18}$　　(5) $4\dfrac{16}{21}$　　(6) $3\dfrac{1}{3}$

(7) $1\dfrac{23}{27}$　　(8) $\dfrac{5}{6}$　　(9) 10

(10) $1\dfrac{13}{27}$

解説

(4) $\dfrac{7}{15} \div 1.68 = \dfrac{7}{15} \div \dfrac{168}{100}$

$= \dfrac{7}{\underset{3}{\cancel{15}}} \times \dfrac{\overset{\overset{5}{\cancel{20}}}{\cancel{100}}}{\underset{\underset{6}{\cancel{24}}}{\cancel{168}}}$

$= \dfrac{5}{18}$

(6) $\dfrac{17}{10} \div 0.51 = \dfrac{17}{10} \div \dfrac{51}{100}$

$= \dfrac{\overset{1}{\cancel{17}}}{\underset{1}{\cancel{10}}} \times \dfrac{\overset{10}{\cancel{100}}}{\underset{3}{\cancel{51}}}$

$= \dfrac{10}{3} = 3\dfrac{1}{3}$

4

(1) $3\dfrac{1}{3}$　　(2) 5　　(3) 20

(4) $1\dfrac{23}{27}$　　(5) $3\dfrac{1}{3}$　　(6) $1\dfrac{7}{18}$

(7) $1\dfrac{7}{18}$　　(8) $\dfrac{25}{28}$　　(9) $13\dfrac{8}{9}$

(10) $3\dfrac{17}{36}$

解説

(8) $3\dfrac{6}{7} \div 4.32 = \dfrac{27}{7} \div \dfrac{432}{100}$

$= \dfrac{27}{7} \times \dfrac{\overset{25}{\cancel{100}}}{\underset{\underset{4}{\cancel{108}}}{\cancel{432}}}$

$= \dfrac{25}{28}$

13