MATHEMATICS
WORKBOOK

3B

Answer Key

Name

KYOIKU DOJINSHA

2 ① Isosceles and Equilateral Triangles

1

① isosceles

② equilateral

2

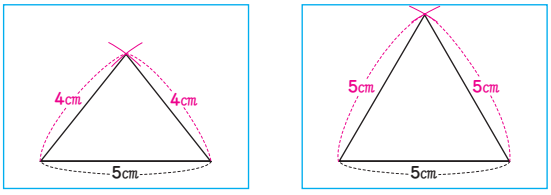
③ ⓒ, ⓕ

④ ⓐ, ⓓ

3 ① Isosceles and Equilateral Triangles

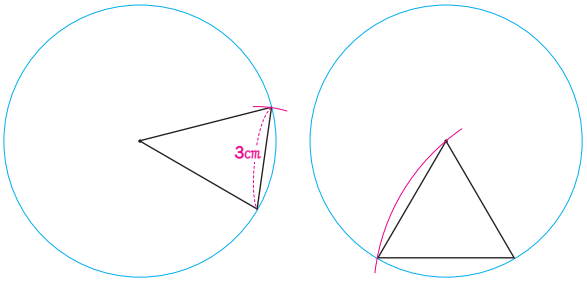
1

① ②



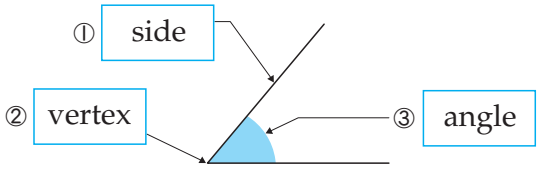
2

③ (Example) ④ (Example)



4 ② Triangles and Angles

1



2

④ isosceles triangle

⑤ 3

3

▶

⑥ isosceles triangle

⑦ equilateral triangle

⑧ ⓒ

5 11. Triangles

1

① isosceles triangle

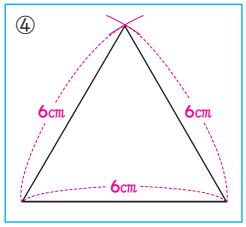
② A , B and C

2

③ ⓒ, ⓐ, ⓓ, ⓑ

3

④



6 ① Division Algorithm(1)

① 14 R0 (4)56, 4, 16, 16, 0

② 27 R1 (3)81, 6, 21, 21, 0

③ 17 R0 (2)34, 2, 14, 14, 0

④ 16 R0 (4)64, 4, 24, 24, 0

⑤ 25 R0 (3)75, 6, 15, 15, 0

⑥ 17 R0 (5)85, 5, 35, 35, 0

⑦ 24 R0 (4)96, 8, 16, 16, 0

⑧ 13 R0 (6)78, 6, 18, 18, 0

⑨ 12 R0 (5)60, 5, 10, 10, 0

⑩ 15 R0 (6)90, 6, 30, 30, 0

7 ① Division Algorithm(1)

① 15 R2 (3)47, 3, 17, 15, 2

② 29 R1 (2)59, 4, 19, 18, 1

③ 14 R4 (5)74, 5, 24, 20, 4

④ 23 R3 (4)95, 8, 15, 12, 3

⑤ 11 R5 (8)93, 8, 13, 8, 5

⑥ 12 R3 (4)51, 4, 11, 8, 3

⑦ 11 R1 (7)78, 7, 8, 7, 1

⑧ 32 R0 (3)96, 9, 6, 6, 0

⑨ 10 R4 (6)64, 6, 4, 0, 4

⑩ 40 R0 (2)80, 8, 0, 0, 0

Let's try these!

① 16 R4

② 48 R1

③ 11 R5

④ 11 R3

⑤ 10 R2

8 ① Division Algorithm(1)

① 376 R0 (2)753, 6, 15, 14, 13, 12, 1

② 133 R0 (4)532, 4, 13, 12, 12, 12, 0

③ 113 R5 (8)909, 8, 10, 8, 29, 24, 5

④ 156 R1 (4)625, 4, 22, 20, 25, 24, 1

⑤ 126 R1 (5)631, 5, 13, 10, 31, 30, 1

⑥ 118 R4 (6)712, 6, 11, 6, 52, 48, 4

⑦ 268 R0 (2)536, 4, 13, 12, 16, 16, 0

⑧ 148 R0 (6)888, 6, 28, 24, 48, 48, 0

⑨ 159 R0 (3)477, 3, 17, 15, 27, 27, 0

⑩ 135 R0 (7)945, 7, 24, 21, 35, 35, 0

9 ① Division Algorithm (1)

① 215 R2 (3)647, 6, 43, 17, 15, 2

② 223 (4)892, 8, 9, 8, 12, 12, 0

③ 121 R2 (6)728, 6, 12, 12, 8, 6, 2

④ 244 R1 (2)489, 4, 8, 8, 9, 8, 1

⑤ 120 (7)840, 7, 14, 14, 0, 0, 0

⑥ 120 R3 (4)483, 4, 8, 8, 3, 0, 3

⑦ 307 R1 (3)921, 9, 2, 0, 21, 21, 0

⑧ 109 R6 (9)987, 9, 8, 0, 87, 81, 6

⑨ 1493 R3 (5)7468, 5, 24, 20, 46, 45, 18, 15, 3

⑩ 1293 (4)5172, 4, 11, 8, 37, 36, 12, 12, 0

Let's try these!

① 321 R2
② 141 R1
③ 101 R5
④ 403
⑤ 1067 R1

10 ① Division Algorithm (1)

1

① 76 ÷ 4 = 19

② 19 pencils

2

③ 98 ÷ 5 = 19 R3
19 + 1 = 20

④ 20 days

3

⑤ 835 ÷ 4 = 208 R3

⑥ 208 people will get drawing paper, with 3 sheets will be left.

11 ② Division Algorithm (2)

① 43 R1 (6)259, 24, 19, 18, 1

② 70 R1 (3)211, 21, 1, 0, 1

③ 86 R2 (7)604, 56, 44, 42, 2

④ 79 (2)158, 14, 18, 18, 0

⑤ 92 R1 (3)277, 27, 7, 6, 1

⑥ 41 (6)246, 24, 6, 6, 0

⑦ 40 R5 (7)285, 28, 5, 0, 5

⑧ 90 (5)450, 45, 0, 0, 0

⑨ 889 R5 (9)8006, 72, 80, 72, 86, 81, 5

⑩ 650 (4)2600, 24, 20, 20, 0, 0, 0

12 ② Division Algorithm (2)

① 260 R2 (3)782, 6, 18, 18, 2

② 207 R5 (7)1454, 14, 54, 49, 5

③ 120 R3 (4)483, 4, 8, 8, 3

④ 150 (5)750, 5, 25, 25, 0

⑤ 30 R7 (8)247, 24, 7

⑥ 420 R1 (9)3781, 36, 18, 18, 1

⑦ 104 R2 (6)626, 6, 26, 24, 2

⑧ 407 (2)814, 8, 14, 14, 0

⑨ 100 R6 (7)706, 7, 6

⑩ 2006 (3)6018, 6, 18, 18, 0

13 ② Division Algorithm(2)

1

① ⓐ $25 \times 3 = 75$ ⓑ $75 \div 5 = \boxed{15}$

$\boxed{25} \times \boxed{3} \div \boxed{5} = \boxed{15}$

② ⓐ $25 \div 5 = 5$ ⓑ $5 \times 3 = \boxed{15}$

$(\ 25 \div 5 \times 3\ ) = \boxed{15}$

2

③ 27

④ 4

3

⑤ $32 \times 3 \div 8 = 12$

⑥ 12 students

14 ② Division Algorithm(2)

1

① $192 \div 6 = 32$

② 32 students

2

③ $1126 \div 6 = 187$ R4

$187 + 1 = 188$

④ 188 boxes

3

⑤ $420 \div 3 \div 4 = 35$

⑥ 35 bags

15 ③ How Many Times as Big

1

① $36 \div 9 = 4$

② 4 times

2

③ $56 \div 8 = 7$

④ 7 times

3

⑤ $35 \div 7 = 5$

⑥ 5 times

16 ④ Mental Calculation

1

❶ $60 \div 3 =$ $\boxed{20}$ ①

❷ $12 \div 3 = 4$

The total is: $\boxed{24}$ ②

2

③ 22 ④ 23

⑤ 17 ⑥ 52

⑦ 123 ⑧ 140

⑨ 210 ⑩ 1300

17 12. Division Algorithm

◆

① $4\overline{)72}$ → 18, 4, 32, 32, 0

② $3\overline{)97}$ → 32, 9, 7, 6, 1

③ $4\overline{)83}$ → 20, 8, 3

④ $6\overline{)817}$ → 136, 6, 21, 18, 37, 36, 1

⑤ $3\overline{)618}$ → 206, 6, 18, 18, 0

⑥ $9\overline{)572}$ → 63, 54, 32, 27, 5

⑦ $8\overline{)6500}$ → 812, 64, 10, 8, 20, 16, 4

⑧ $4\overline{)8008}$ → 2002, 8, 8, 8, 0

⑨ 21

⑩ 144

18 12. Division Algorithm

1

① $78 \div 3 = 26$

② 26cm

2

③ $318 \div 5 = 63$ R3

④ We will fill 63 bottles, and there will be 3 dℓ of juice left.

3

⑤ $12 \times 6 \div 8 = 9$

⑥ 9 times

19 What Computation Should We Use?

◆

① $24 \times 8 = 192$

192 pictures

② $145 - 125 = 20$

20m

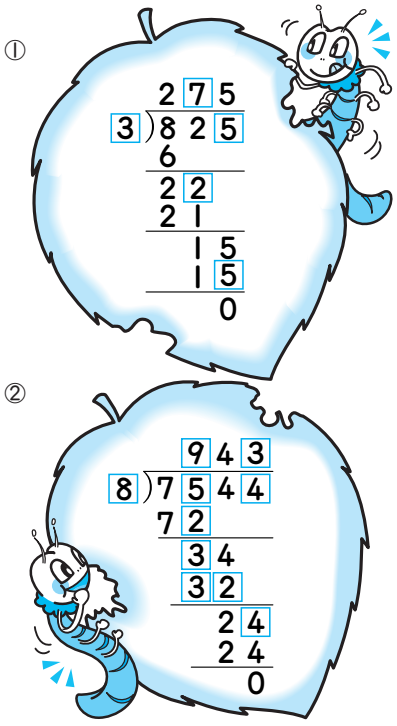
③ $285 \div 5 = 57$

57m

④ $3600 \div 8 = 450$

450 yen

20 Missing Digits Calculation



21 ① How to Express Fractional Parts

1

① 1.7 ℓ　② 0.8 ℓ

2

③ 8
④ 1
⑤ 8
⑥ 0.1

3

⑦ 0.4cm　⑧ 3.6cm
⑨ 7.2cm　⑩ 11.9cm

22 ① The Decimal Number System

1

① 0.8cm
② 2.3cm　③ 3.7cm

2

④ 3.4
⑤ 4.9
⑥ 9.2
⑦ 1.6

3

⑧ (0.3 (0.9))　⑨ ((4) 3.5)
⑩ ((6.2) 5.8)

23 ③ Addition and Subtraction of Decimal Numbers

1

· 0.2 … [2] 0.1's
· 0.6 … [6] 0.1's
} Therefore, the answer is ① [0.8].

2

② 0.5　③ 0.9
④ 1.7　⑤ 1.8
⑥ 2.5　⑦ 7.9
⑧ 1　⑨ 1.3
⑩ 1.3

24 ③ Addition and Subtraction of Decimal Numbers

1

· 0.9 … [9] 0.1's
· 0.5 … [5] 0.1's
} Therefore, the answer is ① [0.4].

2

② 0.3　③ 0.1
④ 1.2　⑤ 2.1
⑥ 4.6　⑦ 0.7
⑧ 0.4　⑨ 0.6
⑩ 0.6

25 ③ Addition and Subtraction of Decimal Numbers

1

① 0.6 + 0.8 = 1.4

② 1.4 ℓ

2

③ 1.8 − 0.6 = 1.2

④ 1.2 dℓ

3

⑤ 0.6 + 0.4 − 0.8 = 0.2

⑥ 0.2 ℓ

26 13. Decimal Numbers

1

① 0.7

② 4.8

③ 2.6

④ 4.7

2

⑤ 3.7 — 3.8 — [3.9] — [4] — 4.1 — 4.2

⑥ 0 — 0.2 — 0.4 — [0.6] — [0.8] — 1 — 1.2

3

⑦ 2.8　　⑧ 1.5

⑨ 1.6　　⑩ 0.8

27 ① Comparing Weights

1

① stapler is heavier by 25 1-yen coins.

▶

② 25 g　　③ 50 g

2

④ 5 g

⑤ 100 g

⑥ 48 g

28 ② Using a Scale to Weigh

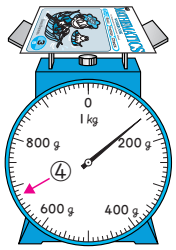
1

① 10 g

② 1000 g, 1 kg

③ 140 g

④



2

⑤ 3000　　⑥ 6300

⑦ 2040　　⑧ 4

⑨ 3, 740

⑩ 7, 90

29 ② Using a Scale to Weigh

1

▶

① 120　② 980　③ 860

2

④ 820 − 250 = 570

⑤ 570 g

3

⑥ 600 × 3 = 1800

1800 g = 1 kg 800 g

⑦ 1 kg 800 g

30 14. Weight

1

① 2 kg

② 10 g

③ 1 kg 150 g

2

④ 9000　⑤ 7800

⑥ 5, 30

3

⑦ 1 kg 700 g − 400 g = 1 kg 300 g

⑧ 1 kg 300 g

31 Check(4)

1

① 376 ÷ 2 = 188

② 103 ÷ 5 = 20 あまり 3

③ 703 ÷ 8 = 87 あまり 7

④ 63　⑤ 8

⑥ 1.4　⑦ 0.4

2

⑧ 90 × 8 = 720

130 + 720 = 850

⑨ 850 g

32 ① Multiplication by Tens

1

① 8 × 20 = (8 × 2) × 10 = 160

② 10, one

2

③ 40　④ 90

⑤ 360　⑥ 420

⑦ 640　⑧ 200

3

⑨ 6 × 20 = 120

⑩ 120 apples

33 ① Multiplication by Tens

1

① 16×40=(16×[4])×10=[640]

② 10, one, 1800

2

③ 520　　④ 1300
⑤ 1920　　⑥ 600
⑦ 7200　　⑧ 1000

3

⑨ 16×50=800
⑩ 800 cards

34 ② Multiplication by a Two-digit Number

◆

① 31×12 = 372
② 14×23 = 322
③ 21×42 = 882
④ 30×13 = 390
⑤ 23×33 = 759
⑥ 11×59 = 649
⑦ 24×14 = 336
⑧ 38×22 = 836
⑨ 19×32 = 608
⑩ 15×56 = 840

Let's try these!
① 276
② 455
③ 544
④ 588
⑤ 621

35 ② Multiplication by a Two-digit Number

◆

① 32×28 = 896
② 73×94 = 6862
③ 24×38 = 912
④ 43×18 = 774
⑤ 29×43 = 1247
⑥ 42×62 = 2604
⑦ 53×27 = 1431
⑧ 46×85 = 3910
⑨ 97×32 = 3104
⑩ 84×76 = 6384

Let's try these!
① 972
② 2808
③ 2158
④ 2538
⑤ 3237

36 ② Multiplication by a Two-digit Number

1

① 17×50 = 850　(17×5, 17×0)
② 26×3 = 78

2

③ 48×20 = 960
④ 36×40 = 1440
⑤ 67×30 = 2010
⑥ 16×8 = 128
⑦ 25×9 = 225
⑧ 83×2 = 166
⑨ 69×4 = 276
⑩ 58×70 = 4060

37 ② Multiplication by a Two-digit Number

◆

① 132 × 12 = 1584

② 473 × 38 = 17974

③ 324 × 32 = 10368

④ 226 × 26 = 5876

⑤ 246 × 83 = 20418

⑥ 825 × 34 = 28050

⑦ 719 × 94 = 67586

⑧ 308 × 52 = 16016

⑨ 503 × 83 = 41749

⑩ 600 × 60 = 36000

Let's try these!

① 11676
② 13067
③ 25795
④ 37080
⑤ 35400

38 ② Multiplication by a Two-digit Number

1

① $43 \times 21 = 903$

② 903 g

2

③ $85 \times 28 = 2380$

④ 2380 yen

3

⑤ $8 \times 65 = 520$

⑥ 520 sheets

4

⑦ $190 \times 15 = 2850$

$3000 - 2850 = 150$

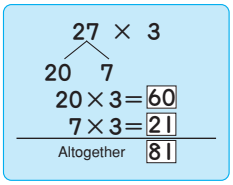
⑧ 150 m

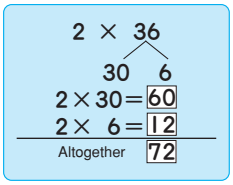
39 ③ Mental Calculation

◆

① 81

② 72





③ 86

④ 90

⑤ 76

⑥ 96

⑦ 640

⑧ 840

⑨ 840

⑩ 750

40 15. Multiplication Algorithm(2)

◆

① 540

② 850

③ 12 × 33 = 396

④ 24 × 32 = 768

⑤ 69 × 14 = 966

⑥ 28 × 73 = 2044

⑦ 57 × 48 = 2736

⑧ 93 × 64 = 5952

⑨ 32 × 80 = 2560

⑩ 493 × 27 = 13311

⑪ 608 × 45 = 27360

41 15. Multiplication Algorithm (2)

1

① $45 \times 16 = 720$

② 720 cranes

2

③ $6 \times 37 = 222$

④ 222 sheets

3

⑤ $126 \times 20 = 2520$

⑥ 2520 yen

42 The Race

1

① $6 - 1 = 5$

$18 \times 5 = 90$

② 90 m

2

③ $4 \times 8 = 32$

④ 32 m

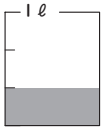
43 ① How to Express Fraction Parts

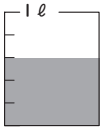
1

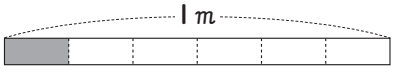
① $\frac{1}{2}$ m

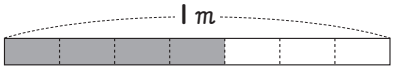
② $\frac{3}{4}$ m

2

③ $\frac{1}{3}$ ℓ 

④ $\frac{3}{5}$ ℓ 

⑤ $\frac{1}{6}$ m 

⑥ $\frac{4}{7}$ m 

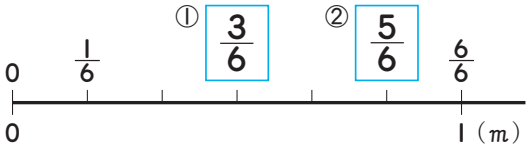
3

▶ ▶

⑦ 5 ⑧ 1 ⑨ 8 ⑩ 3

44 ② The Size of Fractions

1



③ $\frac{4}{6}$

④ $\frac{5}{6}$

⑤ 2

⑥ $\frac{1}{9}$

⑦ 8

2

⑧ 0.2 ⑨ 0.6 ⑩ 0.9

45 ② The Size of Fractions

1

① $\frac{3}{7}+\frac{1}{7}=\boxed{\frac{4}{7}}$

$\frac{1}{7}\times 3$ $\frac{1}{7}\times 1$ $\frac{1}{7}\times(\boxed{3}+\boxed{1})$

2

② $\frac{2}{3}$ ③ $\frac{3}{4}$

④ $\frac{5}{6}$ ⑤ $\frac{7}{8}$

⑥ $1\left(\frac{5}{5}\right)$ ⑦ $1\left(\frac{9}{9}\right)$

3

⑧ $\frac{4}{7}+\frac{2}{7}=\frac{6}{7}$

⑨ $\frac{6}{7}\,\ell$

46 ② The Size of Fractions

1

① $\frac{4}{7}$

② $\frac{4}{5}$

③ $\frac{1}{3}$ ④ $\frac{2}{5}$

⑤ $\frac{5}{8}$ ⑥ $\frac{1}{9}$

⑦ $\frac{3}{4}$ ⑧ $\frac{3}{7}$

2

⑨ $\frac{5}{6}-\frac{2}{6}=\frac{3}{6}$

⑩ $\frac{3}{6}\,m$

47 16. Fractions

1

① $\frac{5}{9}\,\ell$

② $\frac{3}{4}\,km$

2

③ $\left(\frac{1}{9}\left(\frac{8}{9}\right)\right)$ ④ $\left(\frac{2}{3}(1)\right)$

3

⑤ $\frac{7}{8}$ ⑥ $1\left(\frac{4}{4}\right)$

⑦ $\frac{1}{6}$ ⑧ $\frac{3}{10}$

4

⑨ $\frac{1}{8}+\frac{7}{8}=\frac{8}{8}=1$ $1\,\ell$

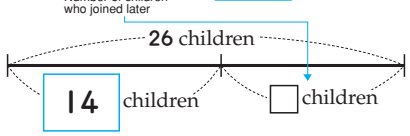
⑩ $\frac{7}{8}-\frac{1}{8}=\frac{6}{8}$ $\frac{6}{8}\,\ell$

48 17. Math Sentences with □

1

① $14+\square=\boxed{26}$

Number of children who joined later

② 

2

③ $80+\square=620$

④ 540 g

3

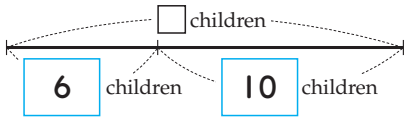
⑤ $86+\square=200$

⑥ 114

49 17. Math Sentences with □

1

① □ − 6 = 10

② 

2

③ □ − 670 = 280

④ 950 m

3

⑤ □ − 52 = 128

⑥ 180

50 17. Math Sentences with □

1

① □ × 5 = 30

② 6 cards

2

③ □ × 6 = 420

④ 70 g

3

⑤ □ × 8 = 176

⑥ 22

51 17. Math Sentences with □

1

① 58　② 78

③ 100　④ 211

⑤ 8　⑥ 21

2

▶

⑦ 25 + □ = 52

⑧ 27 roses

▶

⑨ □ − 85 = 75

⑩ 160 cm

52 ◆ Abacus

1

① fixed point　② 5-bead

③ rod　④ 1-bead

2

⑤ 1, 5

⑥ ones place

3

⑦ 243　⑧ 157　⑨ 809　⑩ 680

53 ◆ Abacus

1

▶

① 2

② 5-bead

▶

③ 2

④ 1-beads

2

⑤ 49　⑥ 62

⑦ 6　⑧ 76

⑨ 4　⑩ 645

54 ◆ Abacus

1

▶

① 5-bead (in the ones place)

② a 1-bead (in the tens place)

▶

③ 1-bead (in the tens place)

④ a 1-bead (in the ones place)

2

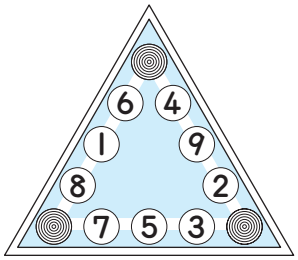
⑤ 10　⑥ 71

⑦ 7　⑧ 19

⑨ 12　⑩ 67

55 Magic Square

① Answers may vary. For example,



② Answers may vary. For example,

6	1	8
7	5	3
2	9	4

56 Check(5)

1

① $\begin{array}{r} 31 \\ \times\ 23 \\ \hline 93 \\ 62 \\ \hline 713 \end{array}$　② $\begin{array}{r} 25 \\ \times\ 37 \\ \hline 175 \\ 75 \\ \hline 925 \end{array}$　③ $\begin{array}{r} 42 \\ \times\ 62 \\ \hline 84 \\ 252 \\ \hline 2604 \end{array}$

④ $\begin{array}{r} 47 \\ \times\ 30 \\ \hline 1410 \end{array}$　⑤ $\begin{array}{r} 362 \\ \times\ 54 \\ \hline 1448 \\ 1810 \\ \hline 19548 \end{array}$　⑥ $\begin{array}{r} 709 \\ \times\ 82 \\ \hline 1418 \\ 5672 \\ \hline 58138 \end{array}$

⑦ $1\left(\frac{6}{6}\right)$　⑧ $\frac{3}{9}$

2

⑨ □ × 4 = 36

⑩ 9 years old

3

⑪ 381　⑫ 181

57 Numbers

1

① 7
② 390
③ 4,000,500
④ 6.4
⑤ seven
⑥ seven
⑦ seven
⑧ $\frac{5}{6}$

2

⑨ 3.1 ➡ 1.8 ➡ 1.4 ➡ 0.9 ➡ $\frac{5}{10}$

58 Multiplication

1

① 32 × 6 = 192
② 56 × 9 = 504
③ 754 × 7 = 5278
④ 84 × 37 = 588 + 252 = 3108
⑤ 24 × 99 = 216 + 2160 = 2376
⑥ 45 × 60 = 2700
⑦ 387 × 46 = 2322 + 15480 = 17802
⑧ 605 × 34 = 2420 + 18150 = 20570
⑨ 900 × 20 = 18000

2

96 × 25 = 2400
⑩ 2400 m

59 Division

1

① 9　② 90
③ 3 R5　④ 9 R2

⑤ 13 R2 (4)52 — 4, 12, 12, 0
⑥ 13 R5 (7)96 — 7, 26, 21, 5
⑦ 10 R4 (6)64 — 6, 4
⑧ 125 (5)625 — 5, 12, 10, 25, 25, 0
⑨ 42 (9)378 — 36, 18, 18, 0
⑩ 806 R1 (3)2419 — 24, 19, 18, 1

2

⑪ 38 ÷ 5 = 7 R3
7 + 1 = 8
⑫ 8 benches

60 Calculation with Decimal Numbers and Fractions

◆

① 0.9　② 1.9
③ 1.9　④ 6.7
⑤ 1　⑥ 1.4
⑦ 0.5　⑧ 1.1
⑨ 1.6　⑩ 0.5
⑪ 0.7　⑫ 0.7
⑬ $\frac{3}{5}$　⑭ $\frac{5}{7}$
⑮ 1 ($\frac{8}{8}$)　⑯ 1 ($\frac{4}{4}$)
⑰ $\frac{1}{5}$　⑱ $\frac{4}{9}$
⑲ $\frac{1}{3}$　⑳ $\frac{2}{6}$

61 Time and Elapsed Time / Length / Weight

1

① 240　② 1, 55

③ 6000　④ 5060

2

⑤ 10＋20＝30

⑥ 30 minutes

3

⑦ 650＋400＝1050

1050 m ＝ 1 km 50 m

⑧ 1 km 50 m

4

⑨ 2 kg 100 g ＝ 2100 g

400＋□＝2100

⑩ 1 kg 700 g（1700 g ＝ 1 kg 700 g）

62 Geometic Figures

1

① 16 cm

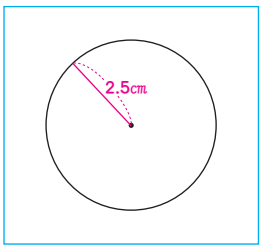
② equilateral triangle

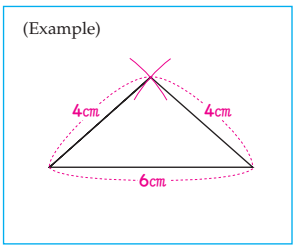
2

③ f

3

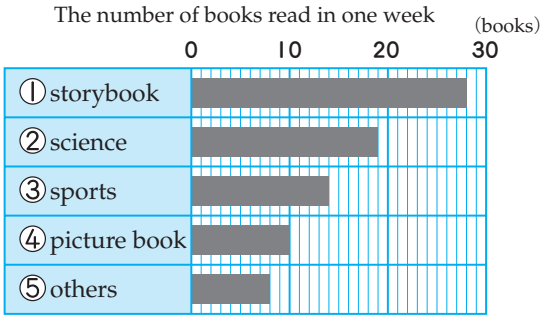
④　⑤





63 Tables and Graphs

1



2

⑥ 2 times

⑦ 27 times

▶

⑧ 6 more times　⑨ 1 more times

⑩ Nancy

64 Word Problems

1

① 80＋120＝200

200－190＝10

② 10 cm

2

③ 72－48＝24

24÷2＝12

④ 12 stickers

3

⑤ 3×9＝27

⑥ 27 m

4

⑦ □×7＝84

⑧ 12 pieces