

MATHEMATICS

WORKBOOK

5A

Answer Key

Name

KYOIKU DOJINSHA

2 Review(1)

1

① 10.2

② 5.7

③ $\frac{5}{7}$

④ $\frac{1}{6}$

2

⑤ 29.6

⑥ 130.5

⑦ 5

⑧ 7

⑨ 0.8

⑩ 0.75

3 Review(2)

1

① 8.2

② 6

2

③ $\frac{10}{9}, 1\frac{4}{9}, 2$

④ $2\frac{5}{7}, 3\frac{1}{7}, \frac{23}{7}$

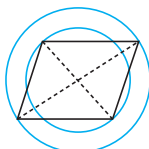
3

⑤ 3

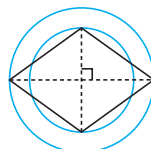
⑥ 46

4

7



8



5

⑨ $5 \times 7 = 35$

⑩ 35cm^2

4 ① Structure of the Numeration System

1

① 2 thousands

② $\frac{1}{10}$ or 0.1

③ 4 of $\frac{1}{100}$

2

④ 9, 8

⑤ 6, 2

⑥ 53.02

3

⑦ 0.459

⑧ 873.2

5 ① Structure of the Numeration System	6 ② Estimating Products and Quotients																
<p>1</p> <p>① right ② left</p> <p>2</p> <p>③ 8650 ④ 10.08 ⑤ 7049 ⑥ 0.046 ⑦ 370 ⑧ 0.04</p> <p>3</p> <p>⑨ 100 ⑩ $\frac{1}{1000}$</p>	<p>1</p> <p>① 300, 240,000 ② 300,000, 60</p> <p>2</p> <table border="0"> <tr> <td>③ 490,000</td> <td>④ 20,000,000</td> </tr> <tr> <td>487,696</td> <td>18,900,546</td> </tr> <tr> <td>⑤ 10,000</td> <td>⑥ 24,000</td> </tr> <tr> <td>8556</td> <td>24,193.5</td> </tr> </table> <p>3</p> <table border="0"> <tr> <td>⑦ 30</td> <td>⑧ 3000</td> </tr> <tr> <td>35</td> <td>2700</td> </tr> <tr> <td>⑨ 2.5 or 3</td> <td>⑩ 0.33... or 0.4</td> </tr> <tr> <td>2.9</td> <td>0.42</td> </tr> </table>	③ 490,000	④ 20,000,000	487,696	18,900,546	⑤ 10,000	⑥ 24,000	8556	24,193.5	⑦ 30	⑧ 3000	35	2700	⑨ 2.5 or 3	⑩ 0.33... or 0.4	2.9	0.42
③ 490,000	④ 20,000,000																
487,696	18,900,546																
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35	2700																
⑨ 2.5 or 3	⑩ 0.33... or 0.4																
2.9	0.42																

7 ① Volume	8 ② Volume of Rectangular Prisms and Cubes
<p>1</p> <p>① 30 ② 30cm^3</p> <p>2</p> <p>③ 80cm^3 ④ 18cm^3 ⑤ 1cm^3</p>	<p>1</p> <p>① length \times width \times height ② l edge \times l edge \times l edge</p> <p>2</p> <p>③ $5 \times 10 \times 4 = 200$ ④ 200cm^3 ⑤ $6 \times 4 \times 3 = 72$ ⑥ 72cm^3 ⑦ $9 \times 9 \times 9 = 729$ ⑧ 729cm^3</p>

9 ② Volume of Rectangular Prisms and Cubes

- ① $9 \times 7 \times 1 = 63$
 $7 \times (9 - 5) \times (4 - 1) = 84$
 $63 + 84 = 147$
- ② 147 cm^3
- ③ $10 \times 6 \times 7 = 420$
 $4 \times 4 \times 6 = 96$
 $420 - 96 = 324$
- ④ 324 cm^3
- ⑤ $8 \times 6 \times 6 = 288$
 $2 \times 2 \times 2 = 8$
 $288 - 8 = 280$
- ⑥ 280 cm^3

10 ② Volume of Rectangular Prisms and Cubes

- ①

Height (cm)	1	2	3	4	5	6
Volume (cm ³)	16	32	48	64	80	96
- ② 2 times, 3 times, ...
- ③ 11 cm
- ④ 2 times, 3 times, ...

11 ③ Units for Large Volumes

- ①
- ① cubic meter
- ② 100, 100, 100
- ②
- ③ $4 \times 5 \times 3 = 60$
- ④ 60 m^3
- ⑤ $1 \text{ m}^3 = 1,000,000 \text{ cm}^3$
 $60 \text{ m}^3 = 60,000,000 \text{ cm}^3$
 or $400 \times 500 \times 300 = 60,000,000$
- ⑥ $60,000,000 \text{ cm}^3$
- ③
- ⑦ $6 \times (5 + 3 + 2) \times 3 = 180$
 $3 \times 3 \times 3 = 27$
 $180 - 27 = 153$
- ⑧ 153 m^3

12 ④ Capacity

- ①
- ① 8 cm
 10 cm
 5 cm
- ② $8 \times 10 \times 5 = 400$
- ③ 400 cm^3
- ②
- ④ $(20 - 4) \times (16 - 4) \times (7 - 2) = 960$
- ⑤ 960 cm^3
- ⑥ $(19 - 4) \times (19 - 4) \times (22 - 2) = 4500$
- ⑦ 4500 cm^3
- ③
- ⑧ $7 \times 4 \times 5 = 140$
- ⑨ 140 m^3

13 ④ Capacity**1**

- ① 1000
 ② 100
 ③ 1,000,000, 1000

2

- ④ $40 \times 60 \times 40 = 96,000$
 ⑤ $96,000 \text{ cm}^3$
 ⑥ $40 \times 60 \times 20 = 48,000$
 $48,000 \text{ cm}^3 = 48 \ell$

⑦ 48ℓ **3**

- ⑧ $25 \times 16 \times 1 = 400$
 $400 \text{ m}^3 = 400,000 \ell$
 ⑨ $400,000 \ell$

14 ④ Capacity**1**

- ① rectangular prism
 ② $30 \times 40 \times 20 = 24,000$
 ③ $24,000 \text{ cm}^3$
 ④ $30 \times 40 \times 15 = 18,000$
 $18,000 \text{ cm}^3 = 18 \ell$
 ⑤ 18ℓ

2

- ⑥ $360 \times 360 \times 300 = 38,880,000$
 $38,880,000 \text{ cm}^3 = 38.88 \text{ m}^3$
 ⑦ 38.88 m^3 or 39 m^3

15 2. Volume**1**

- ① $8 \times 8 \times 8 = 512$
 ② 512 cm^3

2

- ③ $4 \times 12 \times 4 = 192$
 $4 \times 4 \times 3 = 48$
 $192 + 48 = 240$

④ 240 cm^3 **3**

- ⑤
- 4 cm^3
- ,
- 8 cm^3
- ,
- $12 \text{ cm}^3, \dots$

16 2. Volume**1**

- ① $2 \times 5 \times 3 = 30$
 ② 30 m^3
 ③ $30 \text{ m}^3 = 30,000,000 \text{ cm}^3$
 or
 $200 \times 500 \times 300 = 30,000,000$
 ④ $30,000,000 \text{ cm}^3$

2

- ⑤ $20 \times 30 \times 15 = 9000$
 ⑥ 9000 cm^3
 ⑦ $(9000 \text{ cm}^3 = 9 \ell)$ 9ℓ

17 Let's find out their ages!

Tsubasa
My age is the sum of all the numbers not in the ○.

Mother
My age is the sum of all the numbers in the ○.

Grandma
My age is the product of the numbers that are in both the ○ and the □.

Sister
My age is the number that is in the ○, the □, and the △.

Brother
My age is the number that is in the △ but not in the ○ or the □.

34 years old
 $5 + 9 + 7 + 3 + 10 = 34$

12 years old
 $8 + 4 = 12$

63 years old
 $9 \times 7 = 63$

7 years old

4 years old

18 ① Multiplying by a Decimal Number

- 1
- ① 120×3.8
- ② 38
- ③ 10
- ④ 456 g
- 2
- ⑤ $160 \times 5.4 = 864$
- ⑥ 864yen

19 ① Multiplying by a Decimal Number

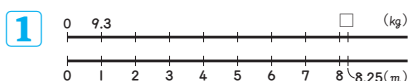
- 1
- ①
- $$\begin{array}{r} 3.24 \\ \times 2.8 \\ \hline 2592 \\ 648 \\ \hline 9.072 \end{array}$$
- 2
- ② 48.36 ③ 42.92 ④ 25.104
- ⑤ 378.48 ⑥ 8.856 ⑦ 29.036
- ⑧ 21.825 ⑨ 1.5437 ⑩ 1.7088

20 ① Multiplying by a Decimal Number

- ①
- $$\begin{array}{r} 15.5 \\ \times 3.2 \\ \hline 310 \\ 465 \\ \hline 49.60 \end{array}$$
- $$\begin{array}{r} 0.13 \\ \times 2.4 \\ \hline 52 \\ 26 \\ \hline 0.312 \end{array}$$
- ③ 21.420 ④ 10.500 ⑤ 4.8000
- ⑥ 0.450 ⑦ 0.8364 ⑧ 0.5400
- ⑨ 243.2 ⑩ 672.00

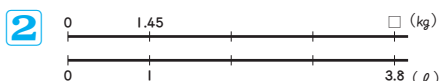
Let's try these! ▶

- ① 3.6300
- ② 4.5100
- ③ 0.0988
- ④ 0.6000

21 ① Multiplying by a Decimal Number

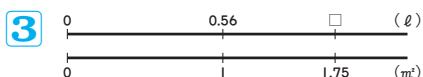
① $9.3 \times 8.25 = 76.725$

② 76.725 kg



③ $1.45 \times 3.8 = 5.51$

④ 5.51 kg



⑤ $0.56 \times 1.75 = 0.98$

⑥ 0.98 l

22 ① Multiplying by a Decimal Number

1

① less

2

② a

③ e

3

④ 47.4 ⑤ 43.0 ⑥ 11.52

⑦ 27.36 ⑧ 0.364 ⑨ 0.5922

23 ① Multiplying by a Decimal Number

1

① $20.9 \times 14.7 = 307.23$

② 307.23 cm^2

2

③ $0.8 \times 0.4 \times 1.2 = 0.384$

④ 0.384 m^3

3

⑤ 0.15

⑥ 0.8, 2.5

4

⑦ $3.2 \times 4 \times 7.5$ ⑧ $8.2 \times 2.6 + 1.8 \times 2.6$
 $= 3.2 \times (4 \times 7.5)$ $= (8.2 + 1.8) \times 2.6$
 $= 3.2 \times 30 = 96$ $= 10 \times 2.6 = 26$

5

⑨ $1.8 \times 2.7 + 1.8 \times 2.3 = 1.8 \times (2.7 + 2.3)$
 $= 1.8 \times 5$
 $= 9$

⑩ 9 m^2

24 ② Times as Many/Much and Multiplication

1

① $16 \div 10 = 1.6$

② 1.6 times

③ $9 \div 10 = 0.9$

④ 0.9 times

2

⑤ $34 \times 1.5 = 51$

⑥ 51 kg

⑦ $34 \times 0.8 = 27.2$

⑧ 27.2 kg

25 3. Multiplication of Decimal Numbers**1**

$$\begin{array}{r} \textcircled{1} \quad 5.2 \\ \times 2.8 \\ \hline 416 \\ 104 \\ \hline 14.56 \end{array}$$

$$\begin{array}{r} \textcircled{2} \quad 8.16 \\ \times 7.5 \\ \hline 4080 \\ 5712 \\ \hline 61.200 \end{array}$$

$$\begin{array}{r} \textcircled{3} \quad 0.42 \\ \times 0.29 \\ \hline 378 \\ 84 \\ \hline 0.1218 \end{array}$$

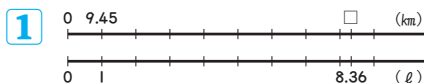
(14.56) (○) (0.1218)

2

④ 43.55 ⑤ 15.30 ⑥ 24.124
⑦ 310.000 ⑧ 0.48

3

⑨ $3.7 \times 4 \times 2.5$ ⑩ $9.8 \times 1.3 + 0.2 \times 1.3$
 $= 3.7 \times (4 \times 2.5)$ $= (9.8 + 0.2) \times 1.3$
 $= 3.7 \times 10$ $= 10 \times 1.3$
 $= 37$ $= 13$

26 3. Multiplication of Decimal Numbers

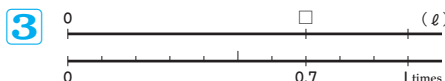
① $9.45 \times 8.36 = 79.002$

② 79.002 km

2

③ $8.25 \times 5.4 = 44.55$

④ 44.55 cm^2



⑤ $4 \times 0.7 = 2.8$

⑥ 2.8 l

27 Check(1)**1**

① 1000 ② $\frac{1}{100}$

2

③ 27.75 ④ 30.10 ⑤ 20.944
⑥ 0.602 ⑦ 0.80000 ⑧ 2240.000

3

⑨ $12 \times 9 \times 4 = 432$
 $(12 - 8) \times 3 \times 4 = 48$
 $432 - 48 = 384$ 384 m^3

⑩ $(12 - 2) \times (12 - 2) \times (11 - 1)$
 $= 10 \times 10 \times 10$
 $= 1000$
 $1000 \text{ cm}^3 = 1 \text{ l}$ 1 l

28 ① Dividing by a Decimal Number**1**

① $270 \div 4.5$

② 10

③ 45

④ 60yen

2

⑤ $54 \div 1.8 = 30$

⑥ 30 kg

29 ① Dividing by a Decimal Number**1**

$$\begin{array}{r} 1.3 \\ 2.4 \overline{) 31.2} \\ \underline{24} \\ 72 \\ \underline{72} \\ 0 \end{array}$$

2

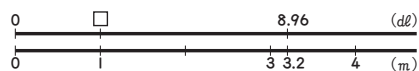
- ② 1.2 ③ 2.7 ④ 2.3
 ⑤ 3.8 ⑥ 2.6 ⑦ 2.9
 ⑧ 9 ⑨ 21 ⑩ 13

30 ① Dividing by a Decimal Number

$$\begin{array}{r} 0.6 \\ 2.6 \overline{) 15.6} \\ \underline{156} \\ 0 \end{array}$$

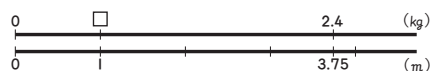
$$\begin{array}{r} 7.5 \\ 1.08 \overline{) 810} \\ \underline{756} \\ 540 \\ \underline{540} \\ 0 \end{array}$$

- ③ 0.95 ④ 0.68 ⑤ 0.8
 ⑥ 35 ⑦ 0.4 ⑧ 5.6

31 ① Dividing by a Decimal Number**1**

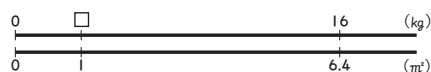
① $8.96 \div 3.2 = 2.8$

② 2.86 dl

2

③ $2.4 \div 3.75 = 0.64$

④ 0.64 kg

3

⑤ $16 \div 6.4 = 2.5$

⑥ 2.5 kg

32 ① Dividing by a Decimal Number**1**

① larger(greater)

2

② c

3

- ③ 48 ④ 86 ⑤ 0.98
 ⑥ 0.65 ⑦ 75 ⑧ 75

33 ① Dividing by a Decimal Number**1**

- ① ones
 ② dividend
 ③ 4, 1.7

2

④ $5.1 \times 94 + 0.6 = 480$

3

- ⑤ 0.5 R0.02
 ⑥ 16.2 R0.07
 ⑦ 0.5 R2.85

34 ① Dividing by a Decimal Number**1**

- ① 2.5 ② 5.1

2

③ $3.1\cancel{0} \rightarrow 3.1$ ④ $1.\overset{7}{\cancel{6}8} \rightarrow 1.7$

⑤ $0.3\cancel{13} \rightarrow 0.31$ ⑥ $0.5\overset{2}{\cancel{1}5} \rightarrow 0.52$

⑦ $1.9\cancel{2} \rightarrow 1.9$ ⑧ $4.9\cancel{0} \rightarrow 4.9$

35 ② Times as Many/Much and Division**1**

- ① $5.4 \div 3.6 = 1.5$
 ② 1.5 times
 ③ $2.7 \div 3.6 = 0.75$
 ④ 0.75 times

2

⑤ $\square \times 1.2 = 10.2$
 $10.2 \div 1.2 = 8.5$

⑥ 8.5 dl

36 4. Division of Decimal Numbers**1**

① $\begin{array}{r} 3.5 \\ 2.16 \overline{) 7.56} \\ \underline{648} \\ 1080 \\ \underline{1080} \\ 0 \end{array}$	② $\begin{array}{r} 8.3 \\ 3.4 \overline{) 28.22} \\ \underline{272} \\ 102 \\ \underline{102} \\ 0 \end{array}$	③ $\begin{array}{r} 5.7 \\ 0.87 \overline{) 5.04} \\ \underline{435} \\ 690 \\ \underline{609} \\ 0.081 \end{array}$
---	---	---

(○) (8.3) (5.7 R0.081)

2

- ④ 2.6 ⑤ 2.5 ⑥ 0.9
 ⑦ 7.5 ⑧ 75

3

⑨ 8.2 R0.08 ⑩ 2.9 R1.55

37 4. Division of Decimal Numbers**1**

① $1.8 \div 0.25 = 7 \text{ R}0.05$

② Can be shared among 7 people,
0.05 ℓ will be left.**2**

③ $4.5 \div 4.8 = 0.93\overline{75}$

④ 0.9 kg

3

⑤ $\square \times 0.8 = 680$

$680 \div 0.8 = 850$

⑥ 850 m^2

38 What kind of calculation is it going to be?**1**

① milk $18.4 \div 8 = 2.3$

tea $27.5 \div 11 = 2.5$

$2.5 - 2.3 = 0.2$

② 0.2 dl more tea.

2

③ $1.3 \times 2.5 = 3.25$

④ 3.25 kg

3

⑤ $7.2 \div 9.6 = 0.75$

⑥ 0.75 times

39 ① Congruent Shapes**1**

① a and i

② c and g

2

③ Vertex F

④ Side GH

⑤ Angle E

⑥ equal (same)

⑦ same (equal)

3

⑧ rectangle

⑨ square

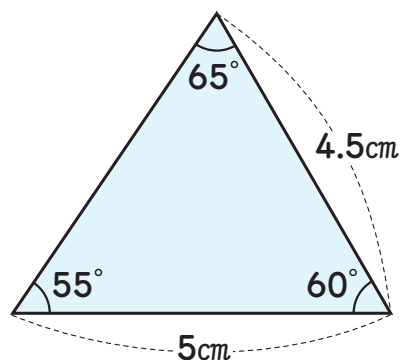
⑩ square

40 ① Congruent Shapes**1**

① side AC, side BC

② side AC, angle A
(side BC, angle B)

③ angle A, angle B

2**4****3**

⑤ AD and CD

41 ② Angles of Triangles and Quadrilaterals

1

① 180°

2

② 65° ③ 40° ④ 110°

3

⑤ 105°

42 ② Angles of Triangles and Quadrilaterals

1

	Quadrilateral	Pentagon	Hexagon
Number of triangles	① 2	② 3	③ 4
Sum of the measures of the angles	④ 360°	⑤ 540°	⑥ 720°

2

⑦ $360 - (52 + 105 + 105) = 98$

⑧ 98°

⑨ $360 - (90 + 130 + 67) = 73$

⑩ 73°

43 Calculation Travel

44 🍷 Making Shapes with Sticks

①

Number of rhombi	1	2	3	4
Number of sticks	4	7	10	13

② 3

③

Number of rhombi	5	6	7
Number of sticks	16	19	22

④ 28

⑤ 12

45 Check(2)**1**

- ① 2.4 ② 2.3 ③ 6
④ 0.26 ⑤ 65 ⑥ 7.5

2

- ⑦ 1.2 R0.58 ⑧ 12.1 R0.084

3

- ⑨ 90° ⑩ 60°

46 ① Area of Parallelograms**1**

- ① base \times height
② GH

2

- ③ $7 \times 5 = 35$
④ 35 cm^2
⑤ $10 \times 12 = 120$
⑥ 120 cm^2
⑦ $9 \times 3 = 27$
⑧ 27 cm^2

47 ① Area of Parallelograms**1**

- ① 5cm

2

- ② $4 \times 7 = 28$
③ 28 cm^2
④ $6 \times 8 = 48$
⑤ 48 cm^2
⑥ $5 \times 11 = 55$
⑦ 55 m^2

48 ② Area of Triangles**1**

- ① base \times height $\div 2$
② $5 \times 6 \div 2 = 15$

2

- ③ $8 \times 7 \div 2 = 28$
④ 28 cm^2
⑤ $15 \times 10 \div 2 = 75$
⑥ 75 cm^2
⑦ $12 \times 5 \div 2 = 30$
⑧ 30 cm^2

49 ② Area of Triangles**1**

① AD

2

② $4 \times 9 \div 2 = 18$

③ 18cm^2

④ $12 \times 11 \div 2 = 66$

⑤ 66m^2

⑥ $7 \times 8 \div 2 = 28$

⑦ 28cm^2

50 ③ Area of Various Quadrilaterals**1**

① $(\text{Top base} + \text{Bottom base}) \times \text{Height} \div 2$

② $(5 + 8) \times 4 \div 2 = 26$

2

③ $(7 + 5) \times 3 \div 2 = 18$

④ 18cm^2

⑤ $(6 + 8) \times 6 \div 2 = 42$

⑥ 42cm^2

⑦ $6 - 2 = 4, \quad 6 - 3 = 3$

$(4 + 3) \times 4 \div 2 = 14$

or

$\{(6 - 2) + (6 - 3)\} \times 4 \div 2 = 14$

⑧ 14cm^2

51 ④ Ideas for Finding the Area**1**

① $13 \times 6 \div 2 = 39$

$13 \times 7 \div 2 = 45.5$

$39 + 45.5 = 84.5$

② 84.5cm^2

③ $6 \times 9 = 54$

$4 \times 6 \div 2 = 12$

$(6 - 3) \times (9 - 2) \div 2 = 10.5$

$54 - 12 - 10.5 = 31.5$

④ 31.5cm^2

⑤ $6 \times 9 \div 2 = 27$

⑥ 27cm^2

2

⑦ $9 \times 8 \div 2 = 36$

⑧ 36cm^2

52 6. Area of Quadrilaterals and Triangles**1**

① $7 \times 5 = 35$

② 35cm^2

③ $5 \times 6 \div 2 = 15$

④ 15cm^2

⑤ $(4 + 12) \times 14 \div 2 = 112$

⑥ 112cm^2

2

⑦ $8 \times 5 \div 2 = 20$

⑧ 20cm^2

⑨ $(6 + 8) \times 5 \div 2 = 35$

⑩ 35cm^2

53 6. Area of Quadrilaterals and Triangles**1**

$$\textcircled{1} (2+4) \times (4+3) \div 2 = 21$$

$$(2+4) \times 4 \div 2 = 12, \quad 21 - 12 = 9$$

or

$$3 \times 2 \div 2 = 3, \quad 3 \times 4 \div 2 = 6$$

$$3 + 6 = 9$$

$$\textcircled{2} 9\text{cm}^2$$

$$\textcircled{3} 8 \times 9 \div 2 = 36, \quad 8 \times 6 \div 2 = 24$$

$$36 - 24 = 12$$

$$\textcircled{4} 12\text{cm}^2$$

$$\textcircled{5} 15 \times 9 \div 2 = 67.5, \quad 18 \times 10 \div 2 = 90$$

$$18 \times 15 \div 2 = 135$$

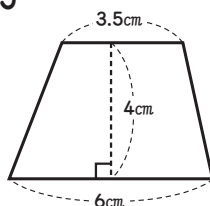
$$67.5 + 90 + 135 = 292.5$$

$$\textcircled{6} 292.5\text{cm}^2$$

2

$$\textcircled{7} (3.5 + 6) \times 4 \div 2 = 19$$

$$\textcircled{8} 19\text{cm}^2$$

**54** 7. Variables and Mathematical Equations**1**

$$\textcircled{1} x \times 6 \quad \textcircled{2} x \times 6 \quad \textcircled{3} 4 \times x$$

2

$$\textcircled{4} 500$$

$$\textcircled{5} 24$$

3

$$\textcircled{6} 200$$

$$\textcircled{7} 15$$

4

$$\textcircled{8} x \times 4 = y$$

$$\textcircled{9} x \div 12 = y$$

$$\textcircled{10} 8 \times x = y$$

55 7. Variables and Mathematical Equations**1**

$$\textcircled{1} 36, \quad 47 + 36 = 83$$

$$\textcircled{2} 6, \quad 16 \times 6 = 96$$

$$\textcircled{3} 63, \quad 63 \div 9 = 7$$

2

$$\textcircled{4} x \div 6 = 4$$

$$\textcircled{5} 24\text{dl}$$

3

$$\textcircled{6} x \times 8 \div 2 = 56$$

$$\textcircled{7} 14\text{cm}$$

56 Check(3)**1**

$$\textcircled{1} 18 \times 9 = 162$$

$$\textcircled{2} 162\text{cm}^2$$

$$\textcircled{3} (13 + 12) \times 10 \div 2 = 125$$

$$\textcircled{4} 125\text{cm}^2$$

$$\textcircled{5} (8 + 12) \times 10 \div 2 = 100$$

$$\textcircled{6} 100\text{cm}^2$$

$$\textcircled{7} 9 - 3 = 6, \quad 9 - 5 = 4$$

$$(6 + 4) \times 6 \div 2 = 30$$

or

$$\{(9 - 3) + (9 - 5)\} \times 6 \div 2 = 30$$

$$\textcircled{8} 30\text{cm}^2$$

2

$$\textcircled{9} 37$$

$$\textcircled{10} 6.5$$