

※ You will receive 1.5 points for each correct answer for problems 1 to 30.

1. Calculate the answer.

$$7 \overline{) 91}$$

- Ⓐ 12 0
- Ⓑ 12 1
- Ⓒ 12 5
- Ⓓ 13 0
- Ⓔ 13 1

2. Calculate the answer.

$$6 \overline{) 88}$$

- Ⓐ 12 4
- Ⓑ 13 1
- Ⓒ 13 2
- Ⓓ 14 3
- Ⓔ 14 4

3. Calculate the answer.

$$28 \overline{) 189}$$

- Ⓐ 5 13
- Ⓑ 5 15
- Ⓒ 6 17
- Ⓓ 6 19
- Ⓔ 6 21

4. Calculate the answer.

$$47 \overline{) 416}$$

- Ⓐ 8 36
- Ⓑ 8 40
- Ⓒ 8 44
- Ⓓ 9 16
- Ⓔ 9 20

5. Calculate the answer.

$$72 \overline{) 562}$$

- Ⓐ 7 46
- Ⓑ 7 52
- Ⓒ 7 58
- Ⓓ 8 18
- Ⓔ 8 24

6. Calculate the answer.

$$43 \overline{) 4183}$$

- Ⓐ 96 41
- Ⓑ 97 12
- Ⓒ 97 23
- Ⓓ 98 3
- Ⓔ 98 10

7. Calculate the answer.

$$27 \div (5 + 4) \times 6$$

- Ⓐ 18
- Ⓑ 19
- Ⓒ 20
- Ⓓ 21
- Ⓔ 22

8. Calculate the answer.

$$6 + 32 \div 8 \times 3 - 9$$

- Ⓐ 7
- Ⓑ 8
- Ⓒ 9
- Ⓓ 10
- Ⓔ 11

9. Calculate the answer.

$$(17 + 4) \div 3 + 3 \times 5$$

- Ⓐ 19
- Ⓑ 20
- Ⓒ 21
- Ⓓ 22
- Ⓔ 23

10. Calculate the answer.

$$43 - 4 \times 6 \div 3$$

- Ⓐ 34
- Ⓑ 35
- Ⓒ 36
- Ⓓ 37
- Ⓔ 38

11. Calculate the answer.

$$(77 - 29) \div 6 + 6 \times 4$$

- Ⓐ 30
- Ⓑ 31
- Ⓒ 32
- Ⓓ 33
- Ⓔ 34

12. Calculate the answer.

$$52 - 3 \times 8 + 35 \div 7 - 14$$

- Ⓐ 19
- Ⓑ 20
- Ⓒ 21
- Ⓓ 22
- Ⓔ 23

13. Calculate the answer.

$$61 - 96 \div ((13 - 8) \times 4 - 12)$$

- Ⓐ 46
- Ⓑ 47
- Ⓒ 48
- Ⓓ 49
- Ⓔ 50

14. Calculate the answer.

$$\begin{array}{r} 7 \text{ km } 185 \text{ m} \\ - 4 \text{ km } 200 \text{ m} \\ \hline \end{array}$$

- Ⓐ 2 km 905 m
- Ⓑ 2 km 985 m
- Ⓒ 3 km 15 m
- Ⓓ 3 km 215 m
- Ⓔ 3 km 385 m

15. Calculate the answer.

$$\begin{array}{r} 5 \text{ kg } 730 \text{ g} \\ + 7 \text{ kg } 380 \text{ g} \\ \hline \end{array}$$

- Ⓐ 12 kg 510 g
- Ⓑ 12 kg 930 g
- Ⓒ 13 kg 10 g
- Ⓓ 13 kg 110 g
- Ⓔ 13 kg 230 g

16. Calculate the answer.

$$\begin{array}{r} 13 \text{ L } 450 \text{ mL} \\ - 3 \text{ L } 880 \text{ mL} \\ \hline \end{array}$$

- Ⓐ 9 L 380 mL
- Ⓑ 9 L 430 mL
- Ⓒ 9 L 570 mL
- Ⓓ 10 L 430 mL
- Ⓔ 10 L 570 mL

17. Express the following time in hours, minutes, and seconds.

8493 seconds

- Ⓐ 2 hr 19 min 13 sec
- Ⓑ 2 hr 21 min 33 sec
- Ⓒ 2 hr 47 min 43 sec
- Ⓓ 3 hr 10 min 13 sec
- Ⓔ 3 hr 24 min 33 sec

18. Calculate the answer.

$$\begin{array}{r} 3 \text{ hr } 33 \text{ min } 43 \text{ sec} \\ + 3 \text{ hr } 38 \text{ min } 19 \text{ sec} \\ \hline \end{array}$$

- Ⓐ 6 hr 42 min 2 sec
- Ⓑ 6 hr 51 min 52 sec
- Ⓒ 7 hr 2 min 52 sec
- Ⓓ 7 hr 5 min 42 sec
- Ⓔ 7 hr 12 min 2 sec

19. Calculate the answer.

$$\begin{array}{r} 9 \text{ hr } 40 \text{ min } 17 \text{ sec} \\ - 4 \text{ hr } 55 \text{ min } 43 \text{ sec} \\ \hline \end{array}$$

- Ⓐ 4 hr 25 min 26 sec
- Ⓑ 4 hr 44 min 34 sec
- Ⓒ 4 hr 54 min 24 sec
- Ⓓ 5 hr 15 min 26 sec
- Ⓔ 5 hr 45 min 34 sec

20. Solve the fraction into its simplest form.

$$\frac{48}{54}$$

- Ⓐ $\frac{4}{9}$
- Ⓑ $\frac{14}{27}$
- Ⓒ $\frac{2}{3}$
- Ⓓ $\frac{23}{27}$
- Ⓔ $\frac{8}{9}$

21. Solve the fraction into its simplest form.

$$\frac{51}{119}$$

- Ⓐ $\frac{3}{14}$
- Ⓑ $\frac{3}{8}$
- Ⓒ $\frac{3}{7}$
- Ⓓ $\frac{4}{9}$
- Ⓔ $\frac{9}{19}$

22. Calculate the answer.

$$6\frac{4}{7} - 4\frac{5}{7}$$

Ⓐ $1\frac{3}{7}$

Ⓑ $1\frac{6}{7}$

Ⓒ $2\frac{1}{7}$

Ⓓ $2\frac{3}{7}$

Ⓔ $2\frac{6}{7}$

23. Calculate the answer.

$$2\frac{9}{11} + \left(4\frac{2}{11} - 3\frac{6}{11}\right)$$

Ⓐ $3\frac{3}{11}$

Ⓑ $3\frac{4}{11}$

Ⓒ $3\frac{5}{11}$

Ⓓ $4\frac{5}{11}$

Ⓔ $4\frac{6}{11}$

24. Calculate the answer.

$$4\frac{5}{12} + 1\frac{7}{9}$$

Ⓐ $5\frac{1}{36}$

Ⓑ $5\frac{7}{36}$

Ⓒ $6\frac{1}{36}$

Ⓓ $6\frac{7}{36}$

Ⓔ $6\frac{11}{36}$

25. Calculate the answer.

$$6\frac{1}{4} - 2\frac{5}{6}$$

Ⓐ $3\frac{5}{12}$

Ⓑ $3\frac{1}{2}$

Ⓒ $3\frac{7}{12}$

Ⓓ $4\frac{1}{12}$

Ⓔ $4\frac{1}{3}$

26. Calculate the answer.

$$1\frac{1}{7} \times 3\frac{3}{5}$$

- Ⓐ $3\frac{3}{35}$
- Ⓑ $3\frac{2}{5}$
- Ⓒ $4\frac{4}{35}$
- Ⓓ $4\frac{3}{7}$
- Ⓔ $5\frac{2}{35}$

27. Calculate the answer.

$$\frac{3}{8} \div 6.4 \times 3\frac{5}{9}$$

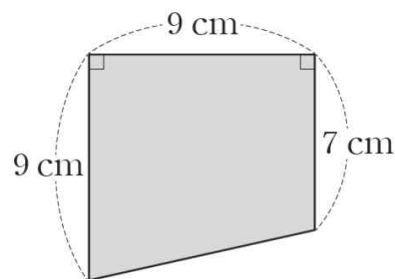
- Ⓐ $\frac{1}{6}$
- Ⓑ $\frac{5}{24}$
- Ⓒ $\frac{1}{4}$
- Ⓓ $\frac{7}{24}$
- Ⓔ $\frac{1}{3}$

28. Calculate the answer.

$$12.4 - 7.64$$

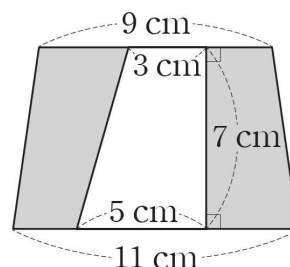
- Ⓐ 4.76
- Ⓑ 4.94
- Ⓒ 5.16
- Ⓓ 5.34
- Ⓔ 5.76

29. Find the area of the trapezoid.



- Ⓐ 72 cm^2
- Ⓑ 84 cm^2
- Ⓒ 96 cm^2
- Ⓓ 108 cm^2
- Ⓔ 120 cm^2

30. Find the area of the shaded section.



- Ⓐ 38 cm^2
- Ⓑ 39 cm^2
- Ⓒ 40 cm^2
- Ⓓ 41 cm^2
- Ⓔ 42 cm^2

※ You will receive 2.0 points for each correct answer for problems 31 to 40.

- 31.** Diana has 312 pears. How many boxes does she need if she can put 12 pears in each box?

_____ boxes

- 32.** Andew can make one dinosaur using 6 sheets of colored paper. When he has 200 sheets of colored paper, how many dinosaurs can he make in total?

_____ dinosaurs

- 33.** Helena has 481 almonds. She will eat six of these almonds in the morning, three for lunch, and four for dinner every day. For how many days can she eat the almonds?

_____ days

- 34.** There are 3 bags of bread in each box, and there are 25 loaves of bread in each bag. How many loaves of bread are there in total in 8 boxes?

_____ loaves

- 35.** In a hotel, 3 people can clean one room in 16 minutes. When 42 people try to clean 112 rooms at the same time, how long does it take?

_____ minutes

- 36.** Nicole makes teddy bears in her factory. She can make 112 teddy bears if she runs the machine for one hour and 20 minutes. If she runs the machine for 8 hours each day, how many days will it take for her to make 2688 teddy bears?

_____ days

- 37.** There is a flag in the shape of a triangle. When the base of the this flag is 35cm and the height is 28cm, what is the area of this flag?

_____ cm^2

- 38.** Wesley weighs 28.725kg, and his father weighs 72.58kg. When his father lifted Wesley and they were weighed together, how much did they weigh? Write down only the decimal part of the answer. (For example, if the answer is 1.234kg write down as 234.)

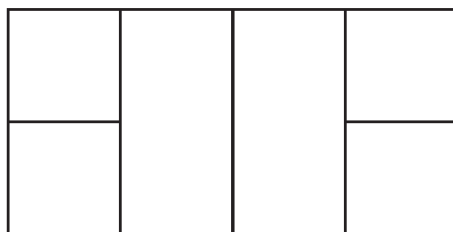
- 39.** A rectangular tile has a width of 12cm and a length of 16cm. If you are connecting these tiles to form a square shape, what is the minimum length of one side of the square?

_____ cm

- 40.** Obelia bought $8\frac{1}{2}$ kg of strawberries at the market. She used $2\frac{5}{6}$ kg of these strawberries to make juice and $3\frac{3}{4}$ kg to make cakes. At this time, how many kilograms of strawberries are left? If the answer is $A\frac{C}{B}$ kg, find the value of $A+B+C$. (Note that $\frac{C}{B}$ is an irreducible fraction.)

- 41.** What is the total number of rectangles (including squares) you can find in the figure below?

[3.3 points]



Answer : _____

- 42.** In the calendar below, the sum of the four numbers written on the top, bottom, left, and right sides of the ★ is 68. What is the value of the number written on the ★? [3.3 points]

Sun	Mon	Tue	Wed	Thu	Fri	Sat

Answer : _____

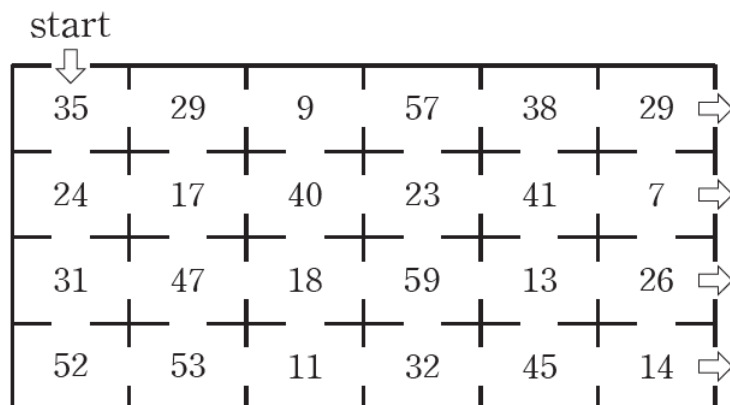
- 43.** How many different numbers can be made with the three cards shown below? (For example: 1, 12)

[3.3 points]



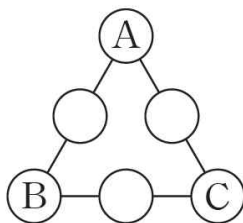
Answer : _____

- 44.** In the maze shown below, if a number can be divided by 3 and the remainder is 2, you move to that square. What is the last number before you exit the maze? [4.3 points]



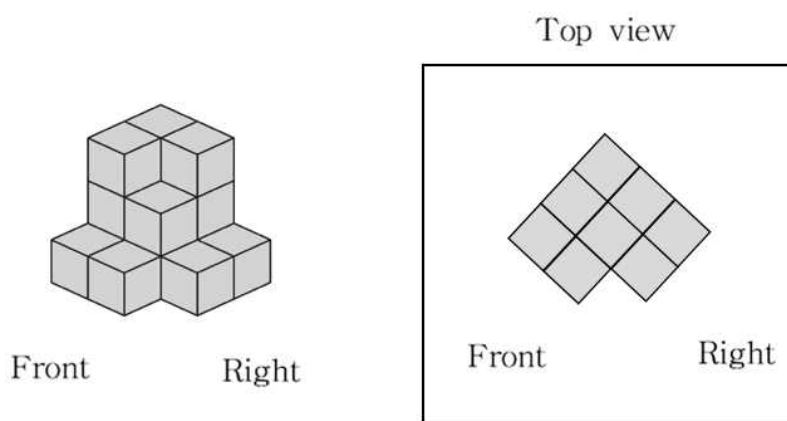
Answer : _____

- 45.** Write each of the six numbers 1, 3, 4, 5, 6, and 8 in the circles so that the sum of the three numbers on each side is equal to 15. Find the value of $A+B+C$. [4.3 points]



Answer : _____

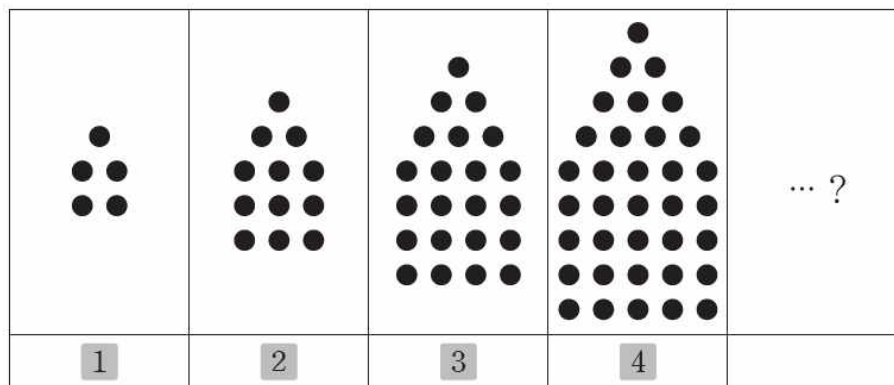
- 46.** A set of wooden blocks, as shown in the picture, has been painted on all sides including the bottom. If the shape is separated into individual blocks, how many of the individual blocks have 4 painted faces? [4.3 points]



Answer : _____

47. The picture below follows an increasing pattern and the figure numbers indicate the order. How many dots(●) would there be in the 7th figure?

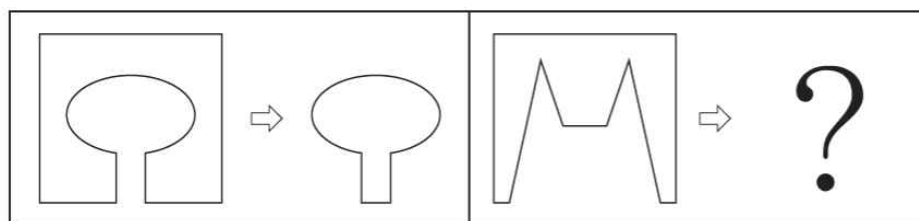
[4.3 points]

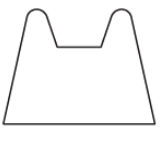


Answer : _____

48. Look at the related figures and find the one that belongs in the “?”.

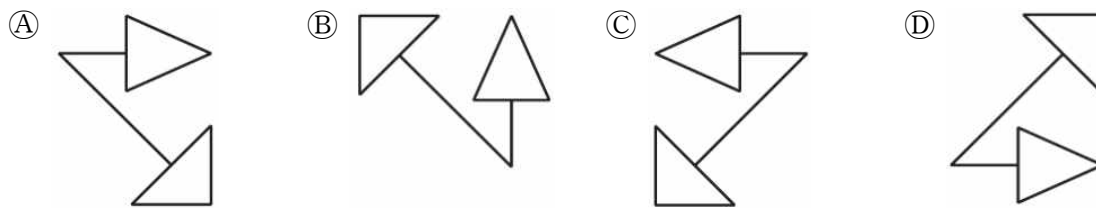
[2.3 points]



- Ⓐ 
 Ⓑ 
 Ⓒ 
 Ⓓ 

Answer : _____

49. When the figure below follows the instructions given in order, which figure will be in the last column as a result? [2.3 points]



Answer : _____

50. Four people, Elena, Jeremy, Olivia, and Tony, competed in a running race. Find out who came in second using the four statements below. [3.3 points]

Elena: I came in earlier than Jeremy.

Jeremy: There was only one person behind me, and then I was overtaken.

Olivia: Elena came in later than I did.

Tony: Two people went in before me.

- Ⓐ Elena Ⓑ Jeremy Ⓒ Olivia Ⓓ Tony

Answer : _____