

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

1. Calculate the answer.

$$\begin{array}{r} 92 \\ \times 37 \\ \hline \end{array}$$

- Ⓐ 2714
- Ⓑ 3154
- Ⓒ 3404
- Ⓓ 3654
- Ⓔ 3814

2. Calculate the answer.

$$\begin{array}{r} 367 \\ \times 73 \\ \hline \end{array}$$

- Ⓐ 26431
- Ⓑ 26791
- Ⓒ 26981
- Ⓓ 27211
- Ⓔ 27501

3. Calculate the answer.

$$4 \overline{) 62}$$

- Ⓐ 13 2
- Ⓑ 14 0
- Ⓒ 14 2
- Ⓓ 15 0
- Ⓔ 15 2

4. Calculate the answer.

$$7 \overline{) 87}$$

- Ⓐ 11 0
- Ⓑ 11 4
- Ⓒ 12 0
- Ⓓ 12 3
- Ⓔ 12 6

5. Calculate the answer.

$$8 \overline{) 95}$$

- Ⓐ 11 5
- Ⓑ 11 7
- Ⓒ 12 5
- Ⓓ 12 7
- Ⓔ 13 5

6. Calculate the answer.

$$3 \overline{) 79}$$

- Ⓐ 26 1
- Ⓑ 26 2
- Ⓒ 27 0
- Ⓓ 27 1
- Ⓔ 28 1

7. Calculate the answer.

$$9 \overline{) 653}$$

- Ⓐ 71 4
- Ⓑ 71 6
- Ⓒ 72 1
- Ⓓ 72 3
- Ⓔ 72 5

8. Calculate the answer.

$$4 \overline{) 594}$$

- Ⓐ 146 0
- Ⓑ 146 2
- Ⓒ 148 0
- Ⓓ 148 2
- Ⓔ 149 2

9. Calculate the answer.

$$7 \overline{) 878}$$

- Ⓐ 125 1
- Ⓑ 125 3
- Ⓒ 126 2
- Ⓓ 126 4
- Ⓔ 127 0

10. Calculate the answer.

$$8 \overline{) 7491}$$

- Ⓐ 934 5
- Ⓑ 935 1
- Ⓒ 935 6
- Ⓓ 936 3
- Ⓔ 936 7

11. Calculate the answer.

$$42 \overline{) 351}$$

- Ⓐ 8 5
- Ⓑ 8 15
- Ⓒ 8 25
- Ⓓ 9 23
- Ⓔ 9 33

12. Calculate the answer.

$$23 \overline{) 589}$$

- Ⓐ 23 18
- Ⓑ 24 7
- Ⓒ 24 17
- Ⓓ 25 8
- Ⓔ 25 14

13. Calculate the answer.

$$39 \overline{) 945}$$

- Ⓐ 22 27
- Ⓑ 23 18
- Ⓒ 24 9
- Ⓓ 25 30
- Ⓔ 26 11

14. Calculate the answer.

$$58 \overline{) 805}$$

- Ⓐ 11 47
- Ⓑ 12 19
- Ⓒ 12 39
- Ⓓ 13 11
- Ⓔ 13 51

15. Calculate the answer.

$$84 \overline{) 820}$$

- Ⓐ 7 52
- Ⓑ 8 28
- Ⓒ 8 78
- Ⓓ 9 64
- Ⓔ 9 74

16. Calculate the answer.

$$26 \overline{) 8251}$$

- Ⓐ 317 9
- Ⓑ 318 13
- Ⓒ 319 17
- Ⓓ 320 1
- Ⓔ 321 15

17. Calculate the answer.

$$77 \overline{) 9752}$$

- Ⓐ 124 44
- Ⓑ 125 17
- Ⓒ 126 50
- Ⓓ 127 23
- Ⓔ 128 66

18. Calculate the answer.

$$89 \overline{) 7435}$$

- Ⓐ 79 46
- Ⓑ 80 15
- Ⓒ 81 54
- Ⓓ 82 17
- Ⓔ 83 48

19. Calculate the answer.

$$64 \overline{) 59281}$$

- Ⓐ 926 17
- Ⓑ 915 61
- Ⓒ 904 45
- Ⓓ 893 49
- Ⓔ 882 23

20. Calculate the answer.

$$(7 + (83 - 8) \div 3) \times 6$$

- Ⓐ 206
- Ⓑ 192
- Ⓒ 184
- Ⓓ 178
- Ⓔ 162

21. Calculate the answer.

$$17 + 36 \div (12 - 3) \times 3$$

- Ⓐ 27
- Ⓑ 28
- Ⓒ 29
- Ⓓ 30
- Ⓔ 31

22. Calculate the answer.

$$31 - (63 + 21) \div (4 \times (16 - 9))$$

- Ⓐ 24
- Ⓑ 25
- Ⓒ 26
- Ⓓ 27
- Ⓔ 28

23. Calculate the answer.

$$(61 - 37) \div 8 + (45 - (4 + 8) - 6) \times 3$$

- Ⓐ 82
- Ⓑ 84
- Ⓒ 86
- Ⓓ 88
- Ⓔ 90

24. Calculate the answer.

$$6\frac{3}{5} + \left(5 - 3\frac{1}{5}\right)$$

- Ⓐ $7\frac{2}{5}$
- Ⓑ $7\frac{3}{5}$
- Ⓒ $8\frac{2}{5}$
- Ⓓ $8\frac{3}{5}$
- Ⓔ $8\frac{4}{5}$

25. Calculate the answer.

$$8\frac{2}{9} - \left(5\frac{4}{9} - 2\frac{7}{9}\right)$$

- Ⓐ $4\frac{5}{9}$
- Ⓑ $4\frac{7}{9}$
- Ⓒ $5\frac{2}{9}$
- Ⓓ $5\frac{4}{9}$
- Ⓔ $5\frac{5}{9}$

26. Calculate the answer.

$$9\frac{9}{17} - 5\frac{11}{17} + 3\frac{6}{17}$$

- Ⓐ $7\frac{4}{17}$
- Ⓑ $7\frac{9}{17}$
- Ⓒ $7\frac{14}{17}$
- Ⓓ $8\frac{1}{17}$
- Ⓔ $8\frac{7}{17}$

27. Calculate the answer.

$$\begin{array}{r} 4.639 \\ + 4.98 \\ \hline \end{array}$$

- Ⓐ 9.519
- Ⓑ 9.589
- Ⓒ 9.619
- Ⓓ 9.669
- Ⓔ 9.719

28. Calculate the answer.

$$\begin{array}{r} 8.27 \\ - 3.576 \\ \hline \end{array}$$

- Ⓐ 4.606
- Ⓑ 4.694
- Ⓒ 4.806
- Ⓓ 5.704
- Ⓔ 5.794

29. Solve the fraction into its simplest form.

$$\frac{42}{78}$$

- Ⓐ $\frac{7}{17}$
- Ⓑ $\frac{6}{17}$
- Ⓒ $\frac{7}{16}$
- Ⓓ $\frac{7}{13}$
- Ⓔ $\frac{6}{13}$

30. Solve the fraction into its simplest form.

$$\frac{96}{216}$$

- Ⓐ $\frac{4}{9}$
- Ⓑ $\frac{7}{16}$
- Ⓒ $\frac{3}{7}$
- Ⓓ $\frac{5}{12}$
- Ⓔ $\frac{3}{8}$

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

- 31.** Each tray holds 26 eggs. If there are 17 trays, how many eggs are there in total?

_____ eggs

- 32.** A teacher is trying to organize 42 students. How many lines are needed if there are 3 students in each line?

_____ lines

- 33.** Rachel wants to cut a 1m 12cm long baguette into 7cm-long pieces. How many pieces of baguette will be made?

_____ pieces of baguette

- 34.** Simon's book is 182 pages long. How many days will it take to finish the book if he reads 14 pages each day?

_____ days

- 35.** Trudy wants to pack 1000 cartons of milk, with 28 cartons in each box. After packing, how many cartons of milk will be left over?

_____ cartons of milk

- 36.** Uriah is 9 years old, Dad is four times Uriah's age, and Mom is 1 year younger than Dad. If Mom is five times Uriah's sister's age, how old is Uriah's sister?

_____ years old

- 37.** Vivian went on a trip to the beach by car. It took 2 hours and 12 minutes going to the beach, and 6780 seconds on the way back. How many minutes did Vivian spend in the car in total?

_____ minutes

- 38.** The perimeter of a square flower garden is 52m. What is the area of the flower garden?

_____ m²

39. A basket containing grapes weighs 2.53kg and the grapes alone weigh 1.87kg. Find the weight of just the basket. Write two digits of the decimal part as the answer (for example, if the answer is 1.23 kg, write 23).

40. Warren bought a $2\frac{2}{5}$ L bottle of milk. When he drank $\frac{3}{4}$ L of milk, how many L of milk was left? If the answer is $A\frac{C}{B}$ L, find the value of $A + B + C$. (Note that $\frac{C}{B}$ is the simplest fraction.)

- 41.** Consider the numbers from 10 to 500. How many odd numbers look the same when read from left to right as when read from right to left?

[2.3 points]

Answer : _____

- 42.** When making 2-digit numbers with the 4 number cards shown below, how many different 2-digit numbers can be made? [3.3 points]



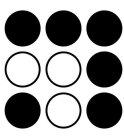
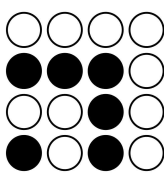
Answer : _____

43. The letters ' a ', ' b ', and ' c ' below represent unknown numbers. Each row will add up to the number on the right, and each column will add up to the number at the bottom. What is the sum of the values of ▲ and ●? [4.3 points]

a	b	c	▲
a	b	b	21
c	c	c	18
●	22	20	

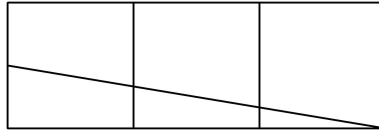
Answer : _____

44. The figures below follow a pattern of increasing black and white stones. How many more white stones are there than black stones in the sixth figure? [4.3 points]

				... ?
1	2	3	4	

Answer : _____

45. What is the total number of quadrilaterals you can find in the figure below? [4.3 points]



Answer : _____

46. Find two numbers that have a sum of 14 and a product of 48. What is the difference between the two numbers? [3.3 points]

$$\square + \triangle = 14$$

$$\square \times \triangle = 48$$

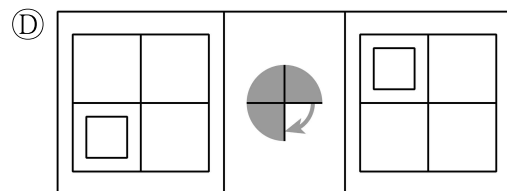
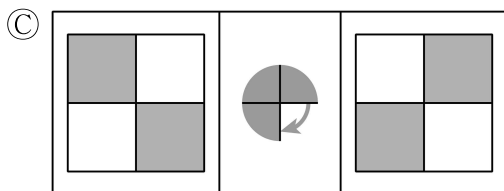
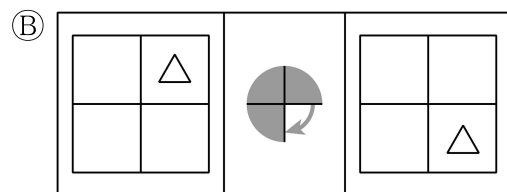
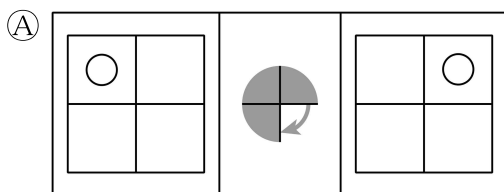
Answer : _____

47. The following figures are all the cases in which two ○ are arranged so that they are not adjacent to each other in a four-compartment box. Find the number of all cases in which two ○ are arranged so that they are not adjacent to each other in a six-compartment box. [3.3 points]



Answer : _____

48. Which of the following is not the result of rotating the given figure in the direction of the arrow? [2.3 points]



Answer : _____

49. Part of the May calendar is covered with ink. What day is the last day of the month? [3.3 points]

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5						11

- Ⓐ Wednesday Ⓑ Thursday Ⓒ Friday Ⓓ Saturday

Answer : _____

50. A, B, C, and D represent 4 pieces of string with different lengths. The lengths of the strings are compared in the following statements.

- String A is half the sum of the lengths of string B and string C.
- Two times the length of string D is equal to three times the length of string C.
- Half the length of string D is equal to the length of string B.

Which is the second longest string among the strings A, B, C, and D?

[4.3 points]

- Ⓐ A Ⓑ B Ⓒ C Ⓓ D

Answer : _____