

TMC - 1



TeenEagle
MATHS

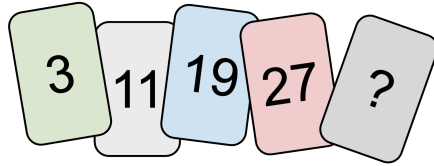
TeenEagle
MATHS

Qualification Round Questions

1. (Logical Thinking)

3
points

Check the number pattern on the cards below:



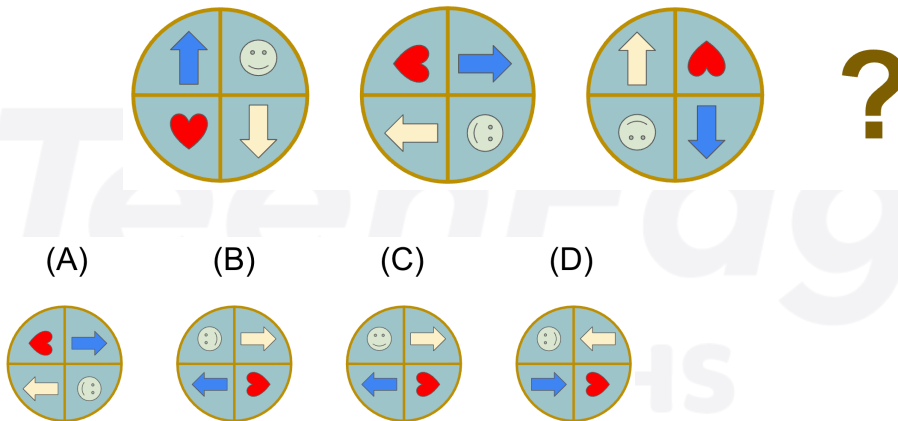
Which number comes next?

- (A) 29 (B) 31 (C) 35 (D) 41

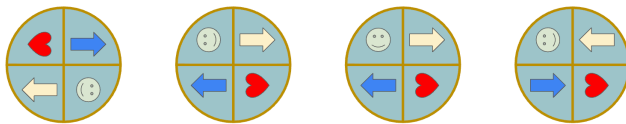
2. (Logical Thinking)

3
points

Look at the pattern of the colour changes. Which cube comes next?



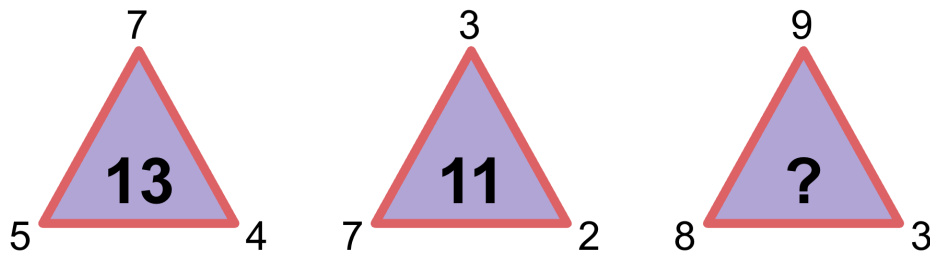
- (A) (B) (C) (D)



3. (Logical Thinking)

3
points

Look at the pattern of the numbers.



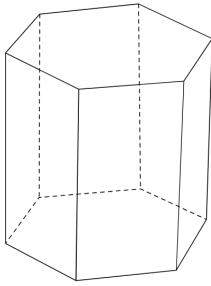
What is the missing number?

- (A) 15 (B) 13 (C) 10 (D) 9

4. (Geometry)

3
points

How many edges does a hexagonal prism have?



- (A) 6 (B) 12 (C) 18 (D) 24

5. (Geometry)

3
points

Jonathan transforms point A(6, 2) to B(12, 4).

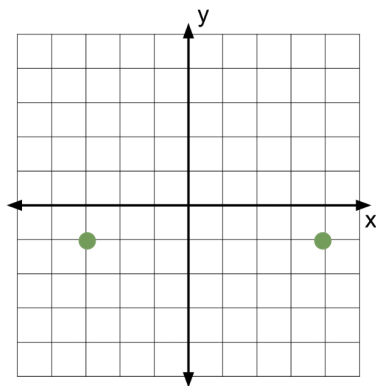
Which transformation is this?

- (A) A translation of 6 units to the right and 2 units up.
(B) A rotation of 90° .
(C) An enlargement with a scale factor of 2, centred at the origin.
(D) A reflection in the line $y = x$.

6. (Geometry)

3
points

Point A is at $(-3, -1)$ and point B is at $(4, -1)$.
What is the distance between them?



- (A) 7 units (B) 6 units (C) 5 units (D) 4 units

7. (Numbers and Operations)

3
points

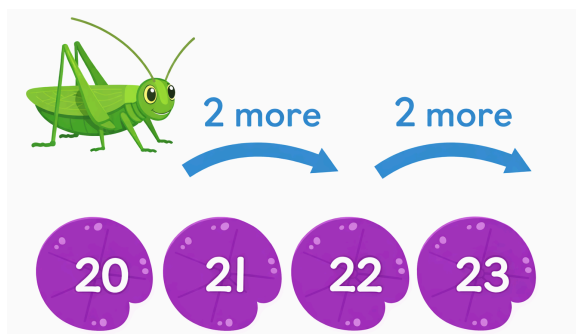
Which two numbers add up to a sum greater than 1000?

- (A) 655 and 340 (B) 889 and 111 (C) 693 and 300 (D) 779 and 222

8. (Numbers and Operations)

3
points

A grasshopper starts at 20.
It jumps forwards in steps of 2.
It makes 8 jumps.



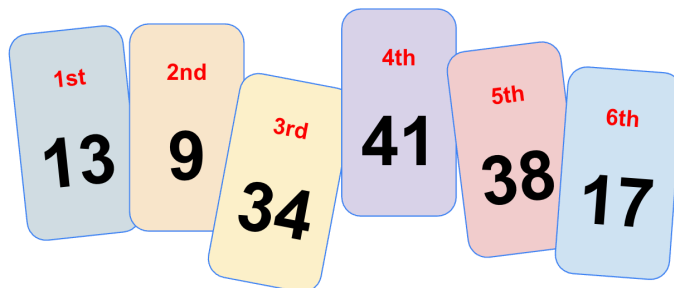
What number does the frog land on?

- (A) 38 (B) 36 (C) 34 (D) 32

9. (Numbers and Operations)

3
points

Arrange the numbers on the cards in descending order:

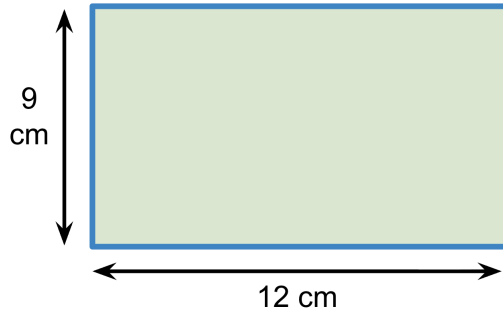


- (A) 4th, 5th, 3rd, 6th, 1st, 2nd
(B) 5th, 4th, 3rd, 6th, 2nd, 1st
(C) 4th, 3rd, 5th, 1st, 6th, 2nd
(D) 3rd, 4th, 5th, 1st, 2nd, 6th

10. (Geometry)

3
points

A rectangle is 12 cm long and 9 cm wide.

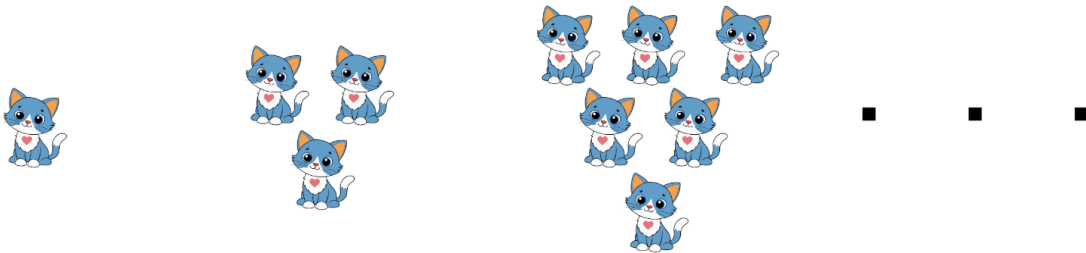


What is its perimeter? (hint: Perimeter of a rectangle is the sum of its four sides).

- (A) 21 cm (B) 24 cm (C) 33 cm (D) 42 cm

11. (Logical Thinking)

4
points



Look at the pattern in the diagram.
If the pattern continues, how many cats will be in the 7th term?

- (A) 28 (B) 21 (C) 15 (D) 10

12. (Logical Thinking)

4
points

Mia and Ben are siblings.
Mia is twice as old as Ben.
In 5 years, the sum of their ages will be 34.

How old is Mia now?

- (A) 10 (B) 12 (C) 14 (D) 16

13. (Logical Thinking)

Zainab received £50 on her birthday. She spends £4 each day at school on weekdays (from Monday to Friday).

If today is Monday, January 1, after how many days will her remaining money be less than £4?

- (A) After 10 days
- (B) After 11 days
- (C) After 12 days
- (D) After 13 days



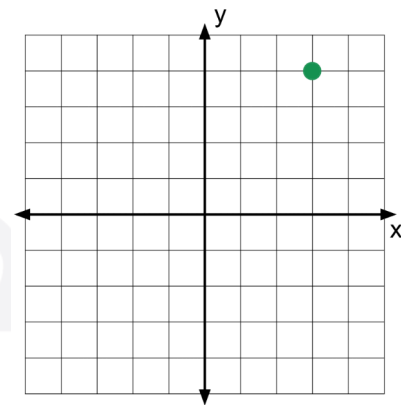
4
points

14. (Geometry)

Point P is at $(3, 4)$. Alex translates it 5 units to the left and 2 units down.

What are the new coordinates of P ?

- (A) $(8, 6)$
- (B) $(8, 2)$
- (C) $(-2, 2)$
- (D) $(2, 2)$



4
points

15. (Geometry)

Bhumi draws a line with endpoints $A(-10, 2)$ and $B(8, 2)$. He wants to mark point P at the midpoint of the line.



Which option gives the coordinates of point P ?

- (A) $(-1, 2)$
- (B) $(-2, 2)$
- (C) $(0, 2)$
- (D) $(2, 2)$

4
points

16. (Measurement)

Ruby arrives at the cinema at 13:15.
A 30-minute pre-show takes place before the begins.
The film lasts 1 hour 20 minutes.

At what time does Ruby leave the cinema?

- (A) 15:35
- (B) 15:05
- (C) 14:55
- (D) 14:35



4
points

17. (Numbers and Operations)

The teacher writes the following expression on the board:

$$7 + 7 + 7 + 7 + 7 + 7 = 7 \times ?$$

What number replaces the question mark ?

- (A) 4
- (B) 5
- (C) 6
- (D) 2

18. (Measurement)

A shopkeeper sells nuts at a TeenEagle shop.
At the beginning of the day he has 8 kg 450 g of nuts.
He sells 5 kg 750 g during the day.

How much does he have left?

- (A) 6 kg 700 g
- (B) 5 kg 950 g
- (C) 3 kg 200 g
- (D) 2 kg 700 g



4
points

19. (Numbers and Operations)

4
points

Choose the correct values of a , b and c .

Number	Rounded to		
	Nearest 10	Nearest 100	Nearest 1000
2 028 459	a	b	c

- (A) $a = 2\ 028\ 460$, $b = 2\ 028\ 500$ and $c = 2\ 029\ 000$
 (B) $a = 2\ 028\ 460$, $b = 2\ 028\ 500$ and $c = 2\ 028\ 000$
 (C) $a = 2\ 028\ 450$, $b = 2\ 028\ 500$ and $c = 2\ 028\ 000$
 (D) $a = 2\ 028\ 450$, $b = 2\ 028\ 500$ and $c = 2\ 038\ 000$

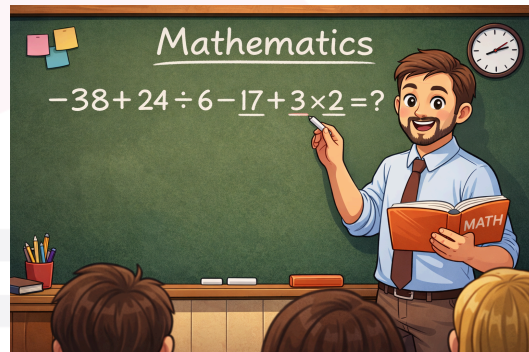
20. (Numbers and Operations)

4
points

A mathematics teacher writes the following expression on the board:

Solve this expression.

- (A) -59
 (B) -47
 (C) -45
 (D) -31



21. (Logical Thinking)

5
points

Jack is 3 years older than twice Emma's age.
 In 2 years, the sum of their ages will be 40.

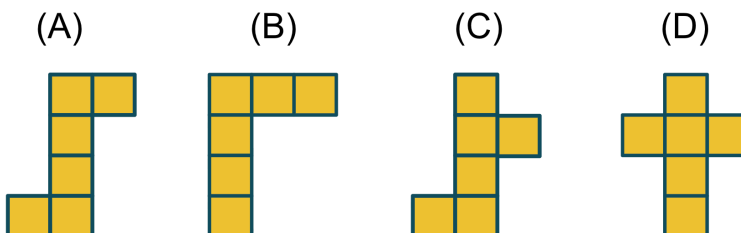
How old is Jack now?

- (A) 23 (B) 25 (C) 27 (D) 29

22. (Logical Thinking)

5
points

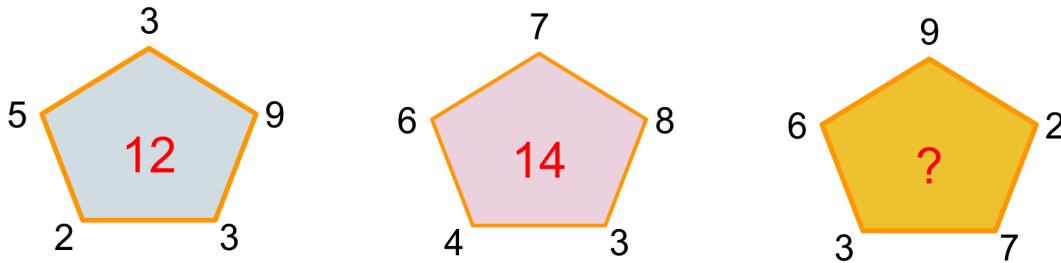
Which of the nets below cannot be folded into a cube?



23. (Logical Thinking)

5
points

Look at the number pattern in the picture.



What is the missing number?

- (A) 7 (B) 8 (C) 10 (D) 16

24. (Numbers and Operations)

5
points

Calculate the following.

$$(180 - 60) \div 6 + (8 - 3) \times 4$$

- (A) 30 (B) 36 (C) 40 (D) 44

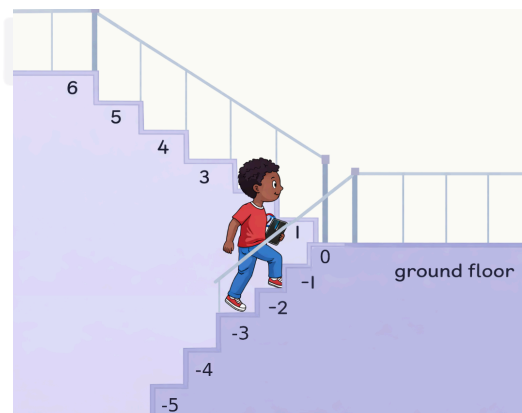
25. (Numbers and Operations)

5
points

Noah starts at -5 on the staircase.
He climbs 9 steps, then goes down 2 steps.

Which step does he finally reach?

- (A) 3
(B) 2
(C) -1
(D) -2



26. (Numbers and Operations)

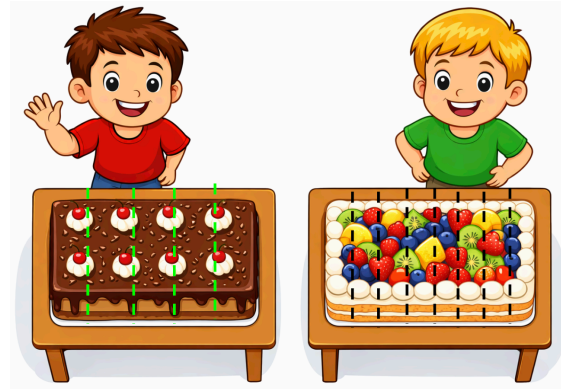
5
points

There are two cakes of the same size, chocolate cake and fruit cake.

The chocolate cake is cut into 5 equal slices.

The fruit cake is cut into 8 equal slices.

Ali takes 3 slices of the chocolate cake and Bobby takes 4 slices of the fruit cake.



Who eats more cake?

- (A) Ali (B) Bobby (C) both ate the same amount (D) Impossible to predict

27. (Geometry)

5
points

A geometry teacher draws a rectangle on the board.

Its length is three times its width.

Its perimeter is 96 cm.

What is its area?

- (A) 96 cm² (B) 144 cm² (C) 288 cm² (D) 432 cm²

28. (Numbers and Operations)

5
points

Find the missing number in the equation below:

$$(6 \times \square + 18) \div 3 = 30$$

- (A) 10 (B) 12 (C) 15 (D) 18

29. (Numbers and Operations)

A TeenEagle juice shop pours 2 L 250 mL of grape juice into bottles. Each bottle holds 350 mL.

How much juice is left over?

- (A) 0 mL
- (B) 150 mL
- (C) 300 mL
- (D) 350 mL



5
points

30. (Geometry)

A square picture frame is made by placing a smaller square exactly in the center of a larger square.

The large square has a side length of 20 cm.

The frame is 4 cm wide all around.

What is the area of the frame?

- (A) 256 cm²
- (B) 304 cm²
- (C) 336 cm²
- (D) 400 cm²

5
points

Answer Key

1	C	11	A	21	B
2	B	12	D	22	B
3	A	13	C	23	A
4	C	14	C	24	C
5	A	15	A	25	B
6	A	16	B	26	A
7	D	17	C	27	D
8	B	18	D	28	B
9	A	19	B	29	B
10	D	20	C	30	A