TeenEagle

MATHS

Category - 3
Grade 5-6

PRACTICE QUESTIONS

TMC

Category - 3
Grade 5 - 6

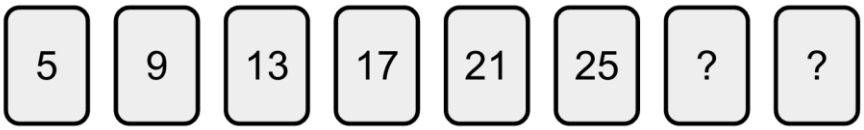
Sample Questions

Topics this category covers:

Topics		
1	Logical Thinking	Balance problem Basic sequences basic number and figure patterns basic logical age and date problems
2	Numbers	Place Value Rounding Decimal Numbers
3	Sequences	Counting and Sequences Square and Triangular Numbers Prime and Composite Numbers
4	Fractions, Decimals, and Percentages	Understanding Fractions Percentages Equivalence and Comparison
5	Ratio and Proportion	Understanding Ratios and Proportions

1. *(1 - Logical Thinking)* *3 points*

The number pattern is shown in the below figure.



What are the next two numbers in the pattern?

(A) 29 and 33 (B) 30 and 34 (C) 30 and 46 (D) 25 and 21

2. *(1 - Logical Thinking)* *3 points*

A man said to the lady, “Your mother’s husband’s sister is my aunt”.

How is the lady related to the man?

(A) Grand daughter (B) Daughter (C) Sister (D) Mother

3. *(2 - Numbers)* *3 points*

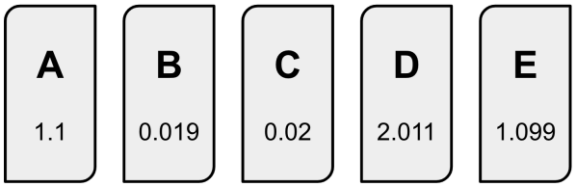
Calculate the following:

£3.62 x 4

(A) £14.48 (B) £10.86 (C) £18.1 (D) £13.04

4. *(2 - Numbers)* *3 points*

Choose the order of the cards with decimals from lowest to the highest?



(A) A < B < C < D < E
(B) B < C < E < A < D
(C) C < B < E < A < D
(D) C < B < C < E < D

5. *(3 - Sequences)* *3 points*

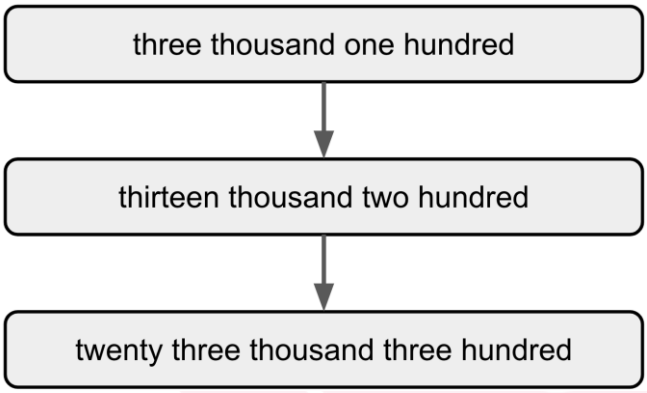
Fill in the missing number in the pattern.
The first number is 2. The rule is to add 3.

2, 5, 8, 11, ___

(A) 14 (B) 11 (C) 8 (D) 13

6. *(3 - Sequences)* *3 points*

The sequence of numbers are given below.
The sequence continues in the same way.



What is the next number in the sequence?

(A) 23 400 (B) 32 300 (C) 33 400 (D) 43 100

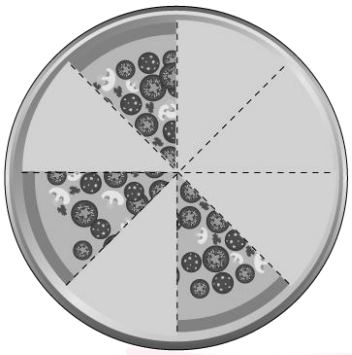
7. *(4 - Fractions, Decimals, and Percentages)* *3 points*

What percentage of this shape is NOT shaded?

(A) 40% (B) 50% (C) 60% (D) 100%

8. *(4 - Fractions, Decimals, and Percentages)* *3 points*

What fraction of the pizza has been eaten?



(A) $\frac{3}{8}$ (B) $\frac{5}{8}$ (C) $\frac{7}{8}$ (D) $\frac{3}{6}$

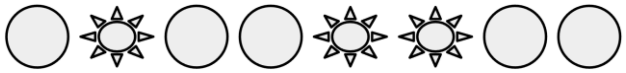
9. *(5 - Ratio and Proportion)* *3 points*

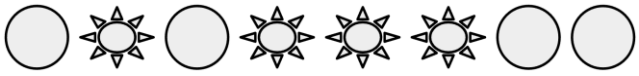
What is the ratio of hexagons to triangles?

(A) 4:5 (B) 3:2 (C) 9:5 (D) 5:4

10. *(5 - Ratio and Proportion)* *3 points*

Which model represents the ratio of 5 circles to 3 stars?

(A) 

(B) 

(C) 

(D) 

11. *(1 - Logical Thinking)* *4 points*

Aman is shorter than John but taller than Mia, Zainab is the tallest. Max is a little shorter than John and a little taller than Aman. If they stand in the order of increasing heights, who will be the third?

(A) Mia (B) John (C) Max (D) Zainab

12. *(1 - Logical Thinking)* *4 points*

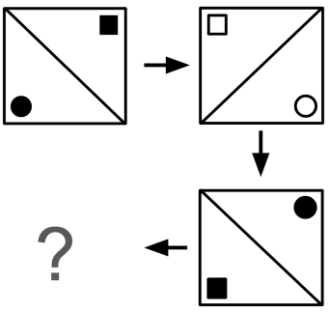
Choose the right image of the word below for the image of it in the water?

HOSHIM

(A) MISHOH
(B) HOSHIM
(C) MOSHIH
(D) HOMISH

13. *(1 - Logical Thinking)* *4 points*

Which of the following options completes the pattern shown in the figure below?



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

14. *(2 - Numbers)* *4 points*

Find the value of each card in the calculations below.

$\frac{1}{4}$ of 36 = A $\qquad$ $\frac{3}{7}$ of 28 = B

$\frac{3}{8}$ of 32 = C $\qquad$ $\frac{5}{9}$ of 81 = D

(A) A = 9, B = 12, C = 12, D = 45
(B) A = 36, B = 28, C = 32, D = 81
(C) A = 36, B = 78, C = 96, D = 405
(D) A = 144, B = 196, C = 256, D = 729

15. *(2 - Numbers)* *4 points*

Calculate the exercise below:

$$\frac{3}{10} + \frac{7}{100} - \frac{4}{50}$$

(A) $\frac{6}{100}$ (B) $\frac{6}{10}$ (C) $\frac{29}{100}$ (D) $\frac{33}{100}$

16. *(3 - Sequences)* *4 points*

The first number in the pattern is 20. The rule is to add 10.

20, 30, 40, 50, ...

Select the true statement.

(A) All of the numbers in this pattern are divisible by 4.
(B) All of the numbers in this pattern are divisible by 5.
(C) All of the numbers in this pattern are prime numbers.
(D) All of the numbers in this pattern are odd numbers

17. *(3 - Sequences)* *4 points*

Anna tried to find the next number in this pattern. The rule for the pattern is subtract 5.

30, 25, 20, …

Anna says the next number is 10. Is she correct?

(A) No, the next number should be 5, because 30 minus 25 is 5.
(B) No, the next number should be 15, because 20 minus 5 is 15.
(C) No, the next number should be 5, because 25 minus 20 is 5.
(D) Yes, Anna is correct.

18. *(4 - Fractions, Decimals, and Percentages)* *4 points*

A worker has 1000 bricks.

If he uses ¼ of the bricks for building a wall, how many bricks are left on the site?

(A) 150 bricks (B) 500 bricks (C) 250 bricks (D) 750 bricks

19. *(4 - Fractions, Decimals, and Percentages)* *4 points*

Jannie is thinking about buying three T-shirts at the store.

If she does, she can get a 70% discount. The original price of each T-shirt is $10.00. How much will Jannie need to pay in total?

(A) $21 (B) $17 (C) $7 (D) $9

20. *(5 - Ratio and Proportion)* *4 points*

Maria bought 2 kilograms of apples. There are 15 apples in total and 8 of these apples are yellow.

If all the apples are either red or yellow, what is the ratio of red apples to yellow apples?

(A) 7 : 8 (B) 8 : 7 (C) 15 : 8 (D) 15 : 7

21. *(1 - Logical Thinking)* *5 points*

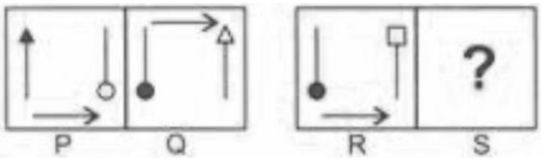
What are the missing letters?

CMM, EOO, GQQ, _____, KUU

(A) GRR (B) GSS (C) ISS (D) ITT

22. *(1 - Logical Thinking)* *5 points*

There is a certain relationship between figures P and Q.



Establish a similar relationship between figures R and S by selecting a suitable figure from the options which will replace (?) in figure S.

(A) 

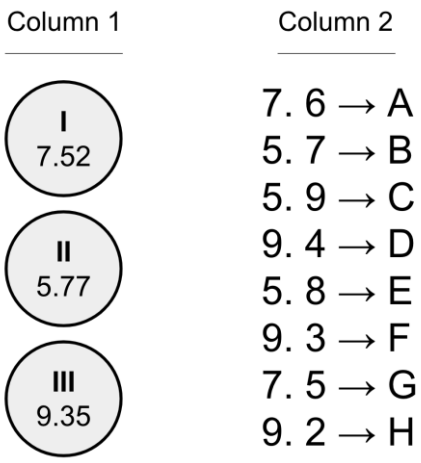
(B) 

(C) 

(D) 

23. *(2 - Numbers)* *5 points*

Select the option matching correctly in the given two columns: Column 1 rounded to Column 2.



(A) I → G, II → E, III → D
(B) I → G, II → B, III → D
(C) I → A, II → E, III → D
(D) I → A, II → B, III → D

24. *(3 - Sequences)* *5 points*

What is the next number in this sequence:

1, 2, 4, 7, 11, 16, _____

(A) 20 (B) 22 (C) 27 (D) 23

25. *(3 - Sequences)* *5 points*

Johnie got a new video game. He scored 1 point on the first level, 3 points on the second level, 9 points on the third level, and 27 points on the fourth level.

If this pattern continues, how many points will he score on the fifth level?

(A) 179 (B) 81 (C) 48 (D) 45

26. *(4 - Fractions, Decimals, and Percentages)* *5 points*

Maxim needs to buy 2 kilograms of tomatoes, 4 kilograms of onions, and 4 bottles of milk. Tomatoes cost $2 per kilogram, onions cost $3 per kilogram, and milk costs $4 per bottle.

Because of the Thanksgiving holiday, the market is having a 25% sale on everything. How much will Maxim spend on groceries?

(A) $32 (B) $8 (C) $16 (D) $24

27. *(4 - Fractions, Decimals, and Percentages)* *5 points*

A laptop originally costs $840. However, Bright-Electronic shop is having a sale where you can get 10% off for the laptop and 50% off for the second laptop if you buy two.

How much would it cost to buy two laptops?

(A) $1680 (B) $840 (C) $1176 (D) $1260

28. *(5 - Ratio and Proportion)* *5 points*

Janny was trying to calculate the number of her students in her school.
She found the ratio of boys to girls across the school was 5:3.

If there were 150 boys in the school, what percentage of the students are girls??

(A) 62.5 % (B) 37.5 % (C) 50 % (D) 100 %

29. *(5 - Ratio and Proportion)* *5 points*

Max's dad bought him a toy car that looks just like his own car, but it's much smaller.

The toy car is 1/10th the size of the real car. If the real car is 2 meters tall, how tall is the toy car?

(A) 20 cm (B) 10 cm (C) 200 cm (D) 1 m

30. *(5 - Ratio and Proportion)* *5 points*

A bakery packs 180 donuts into 15 boxes. Each box is then divided equally among 4 shelves.

Find the unit rate of donuts per shelf.

(A) 3 donuts
(B) 6 donuts
(C) 12 donuts
(D) 24 donuts

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