

MATHEMATICS OLYMPIAD COMPETITION 2017
SELECTION TEST FOR ZONAL LEVEL TRAINING POOL

General Instructions.

- Answer all 20 questions.
- Write the answer on the dotted line given under each question and it is necessary to mention the relevant units if any with the answer.
- Diagrams are not to scale.

Index No :

School :

Grade

Time : 1 hour

1. Find the answer when dividing 20172017 by 2017.

Answer :

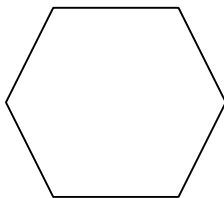
2. Three boxes each contain four bags. Each bag contains five marbles. How many marbles are there altogether in these three boxes?

Answer :

3. Sarath was in the middle of the queue. He was in position 41 from the front. How many people were in the queue?

Answer :

4. How many lines of symmetry does this regular hexagon have?



Answer :

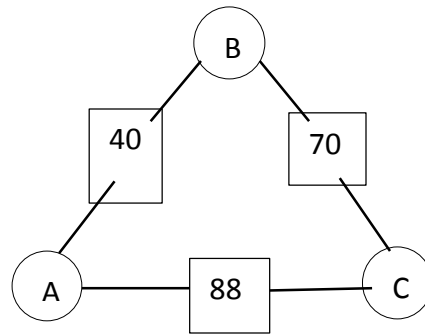
5. Which shape does **not** have any parallel sides among Parallelogram, Square, trapezium and Kite?

Answer :

6. Find the value of $\boxed{A}$, if $\boxed{A} + \boxed{A} = 75 - \boxed{A}$

Answer :

7. In the puzzle below, the sum of the 2 numbers in the 2 circles gives the number in the square between them. What is the value of A?



Answer :

8. If the date on Friday is 14th of a certain month , what is the date of the 3rd Wednesday of that month?

Answer :

9. Kamal counted in 3's as follows:-

15, 18, 21, 24, ...

If he stopped at the 60th number what number did he count last?

Answer :

10. I am a 3 digit number and all the digits are different.

My ten's digit is multiples of 3's.

My hundred's digit is 1 more than my ten's digit.

The product of the three digits is 42.

What is the sum of all digits of mine?

Answer :

11. A man walked total of 65km for 5 days. Every day he walked 4 km less than the day before.

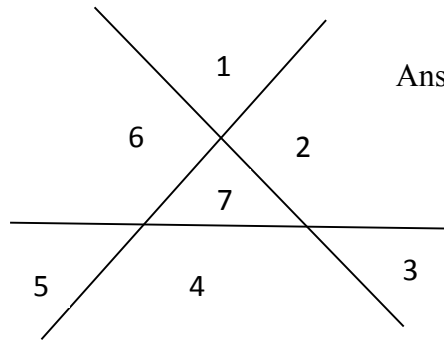
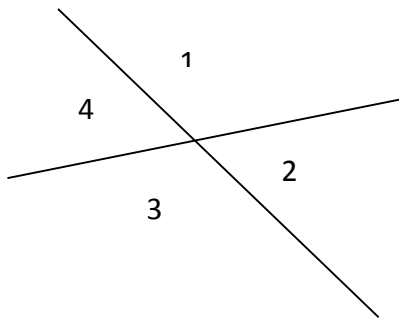
How far did the man walk the in last day?

Answer :

12. Maleesha and Samantha played game with twelve rounds. In each round, the winner scores 5 points and the loser scores 3 points. At the end of the game, Samantha's total score is 44 points. How many rounds did Maleesha win?

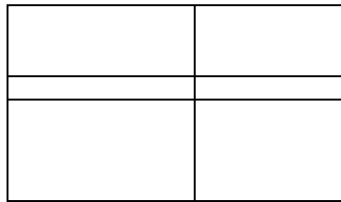
Answer :

13. 2 lines divide the plane into 4 regions. 3 lines divide the plane into 7 regions. How many regions will 6 lines divide the plane?



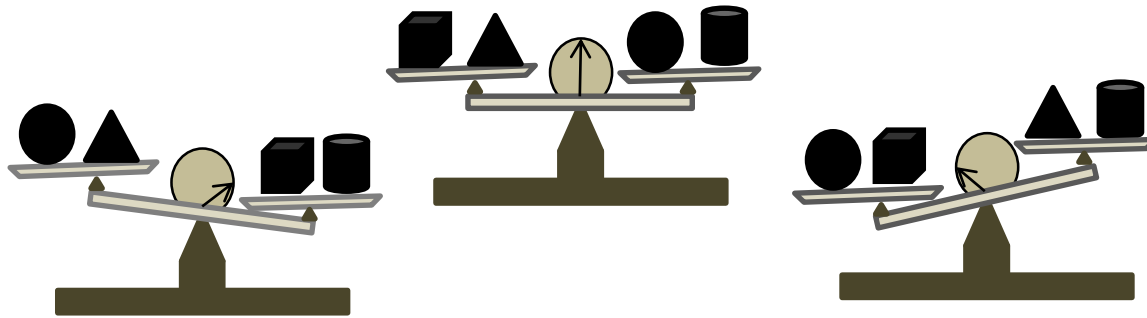
Answer :

14. How many quadrilaterals are in this picture?



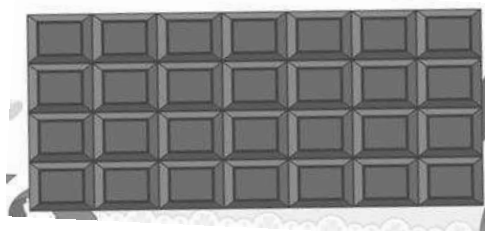
Answer :

15. There are four kinds of stuffed shapes- a sphere, a tetrahedron, a cube and a cylinder. They are placed on balance scales as shown below. Which one is the lightest among this four?



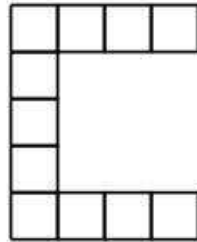
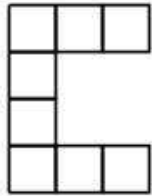
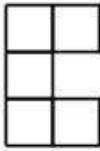
Answer :

16. Nadie wants to eat the chocolate bar piece by piece. To get each individual piece, at least how many times does she have to break the chocolate?



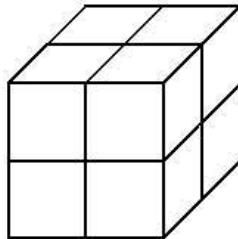
Answer :

17. The first three terms in a pattern of squares are shown below. How many squares will there be in the 8th term?



Answer :

18. There is a big cube made up of pink cubes and blue cubes of the same size. A pink cube weighs 1g and a blue cube weighs 2g. The big cube weighs 10g in total. How many pink cubes did you use to make this big cube?



Answer :

19. A vendor buys 7 pencils for Rs:60.00. He sells them at 4 for Rs:70.00 . How many pencils must he sell to make a profit of Rs1000.00?

Answer :

20. The least common multiple (LCM) of two numbers is 48. If the two numbers are in the ratio 2:3 then find the sum of the two numbers.

Answer :