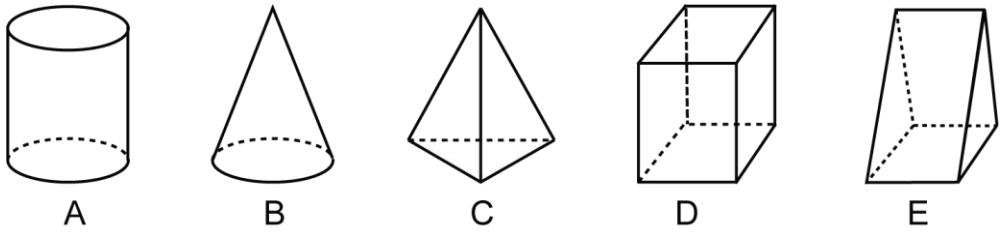
Mathematica Centrum

Together, let's shape the mathematicians of the future

FIBONACCI PREPARATORY TEST 2025

1. Which solid has 6 edges, 4 vertices, and 4 faces?



2. The product of 2 x 3 x 7 is

A) 30 B) 20 C) 40 D) 42 E) 35

3. What number is 8 less than the number that is 8 more than 10?

A) 40 B) 0 C) 20 D) 30 E) 10

4. The number of sides of a pentagon multiplied by the number of sides of an octagon is equal to

A) 32 B) 48 C) 42 D) 40 E) 14

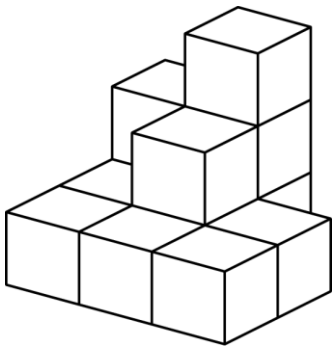
5. The double of one-quarter of the quadruple of 32 is equal to

A) 64 B) 57 C) 67 D) 62 E) 76

6. The tens digit of the product of 50 x 18 is

A) 1 B) 0 C) 2
D) 4 E) 9

7. How many blocks are there in the pile shown?



A) 11 B) 12 C) 13
D) 14 E) 15

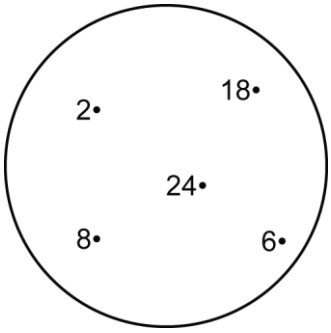
8. The value of X in the equation: 10 - X = 1 + 3 is

A) 3 B) 4 C) 5 D) 2 E) 6

9. How many numbers between 30 and 60 are multiples of 4?

A) 7 B) 8 C) 9
D) 10 E) 11

10. How many elements of the set represented in the diagram are divisors of 48?

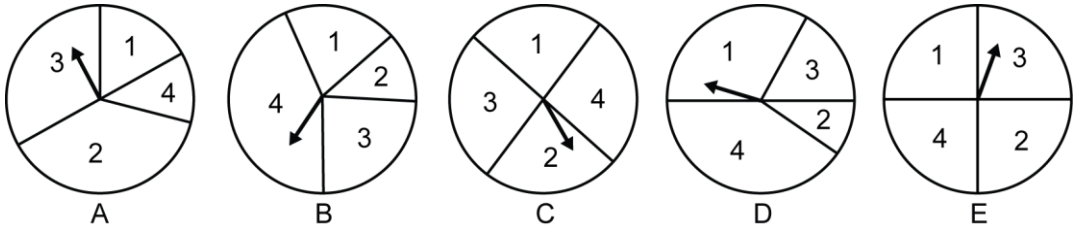


A) 1 B) 2 C) 3
D) 4 E) 5

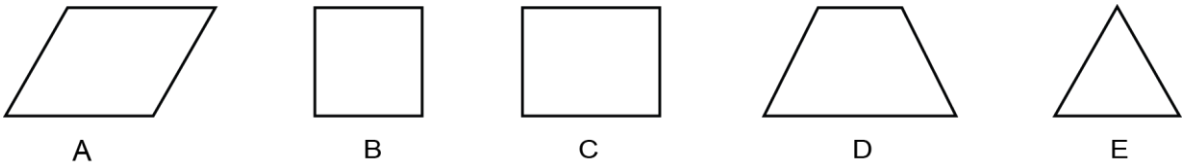
11. The 12th term in the sequence: 0, 3, 6, 9, 12, ... is

A) 24 B) 36 C) 33 D) 18 E) 30

12. Which spinner would you choose to increase your chances of getting a 2 or 4?



13. Which of the figures below has two axes of symmetry?



14. If you write all the natural numbers between 0 and 40, how many times will you use the digit 3?

A) 14 times B) 15 times C) 16 times D) 13 times E) 12 times

15. A package of 600 sheets of paper is 54 millimeters thick. How thick is a pack of 500 sheets of the same paper?

A) 42 mm B) 44 mm C) 46 mm D) 48 mm E) 45 mm

16. It is 6:34. What time will it be in 290 minutes?

A) 10:54 B) 9:54 C) 10:44 D) 11:24 E) 11:54

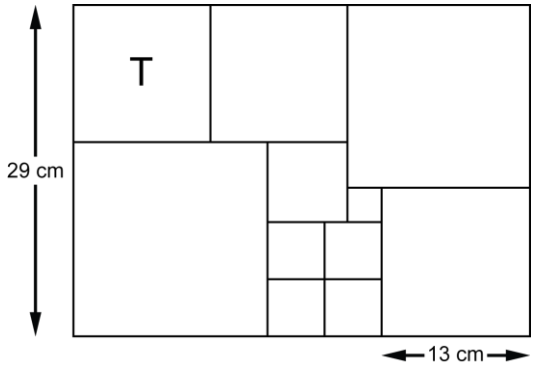
17. There are 30 class groups in Theo's school. Each class group can have a minimum of 25 students and a maximum of 30 students. The difference between the maximum and minimum number of students who could be enrolled in this school is

A) 130 B) 120 C) 145 D) 135 E) 150

18. The sum of 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 is divisible by

A) 5 B) 6 C) 7 D) 8 E) 10

19. Theo used square tiles to completely cover a rectangular surface. Using the measures given in the diagram, find the perimeter of tile T. The sum of the perimeter of the tile T and the perimeter of the rectangular surface is equal to

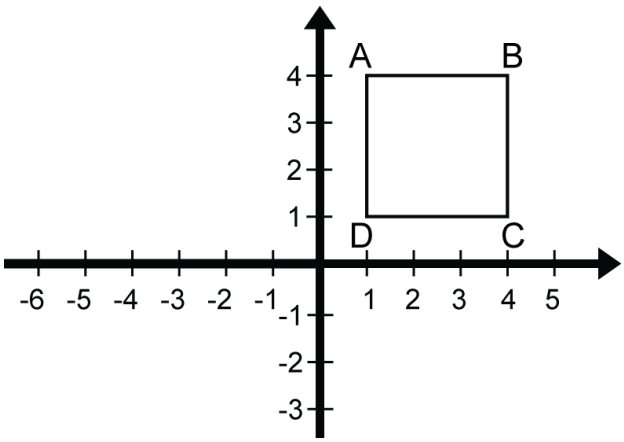


A) 187 cm B) 186 cm C) 188 cm D) 189 cm E) 190 cm

20. Which fraction has the same value as 5/12?

A) 4/9 B) 8/13 C) 10/24 D) 21/36 E) 23/46

21. ABCD is a square. What are the coordinates of the image of vertex C, if the square is moved (translation) 3 units down?



A) (-3 , 4) B) (-2 , 4) C) (4 , -1) D) (4 , -2) E) (4 , -3)

22. The GCD of 30, 45 and 60 is

A) 5 B) 15 C) 30 D) 10 E) 6

23. How many prime numbers are there between 20 and 50?

A) 8 B) 4 C) 5 D) 6 E) 7

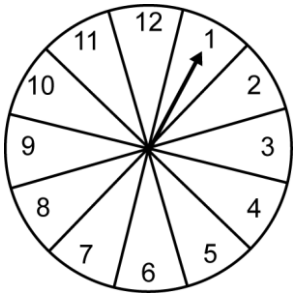
24. From 63 on the number line, how many times do you have to subtract 9 to get to -63?

A) 11 times B) 12 times C) 13 times D) 14 times E) 15 times

25. You have 24 square cartons. Each carton has an area of 1 cm². How many different 24 cm² rectangles can you form?

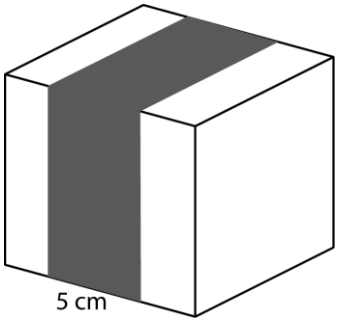
A) 1 B) 2 C) 4
D) 3 E) 5

26. Andrea has made a circular spinner with 12 identical sections. If she spins the spinner only once, what is the probability that she will get a number that is a divisor of 60?



A) 2/3 B) 5/12 C) 1/3
D) 1/2 E) 7/12

27. Mathilda painted part of a wooden 1 000 cm³ (10 cm x 10 cm x 10 cm) cube. She applied a layer of paint perpendicular to the edges of the cube, all around the cube, so that it looks like a strip of ribbon 5 cm wide. What is the area of the cube's surface that has been painted?



A) 190 cm² B) 200 cm² C) 210 cm²
D) 195 cm² E) 205 cm²