



SATISH CHANDRA MEMORIAL SCHOOL

STD: VI

SUB: MATHEMATICS SYLLABUS BASED REASONING TEST-2024

Choose the correct option for the following questions.

1. If $15:25::75:125$ then $30:50::150: \underline{\hspace{1cm}}$?

- A. 200 B. 260 C. 250 D. 240

2. Choose the odd pair from the given pairs.

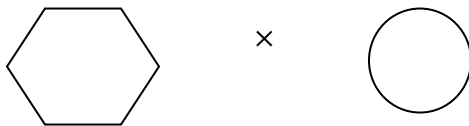
- A. 41,43 B. 71,73 C. 85,86 D. 3,5

3. Choose the odd one from the given options.

A. $\times$ =12



B. $\times$ =0



C. $\times$ =30



D. $\times$ =6



4. Every morning Anjali jogs in a circular field. One morning she has started from the point A as shown in the figure. She had completed clockwise one full revolution and then anticlockwise again one full revolution, the she stopped finally after revolving $\frac{3}{4}$ from the point where she stopped. In which direction she is facing now?

- A. West B. North C. South D. Either B or C

5. Find the missing value.

14	18
2	126

3	5
1	15

13	26
13	26

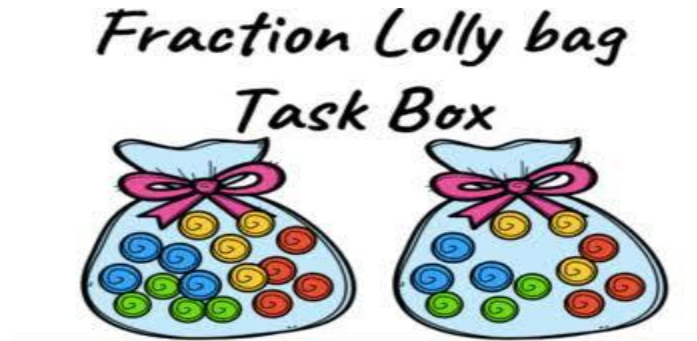
52	16
4	?

6. If rectangle is written as 2, pentagon is written as 5 and circle is written as 0, the triangle is written as

- A. 1 B. 2 C. 3 D. 0

7. What fraction of the total number of yellow and red balls in both the bags is the total number of green and blue balls in the first bag only?

1. $\frac{4}{7}$ 2. $\frac{8}{14}$ 3. $\frac{24}{42}$ 4. $\frac{2}{7}$



8. Points M and N are 7 units apart from each other on the number line. If M is 3 units to the left of 7 then where is N?

1. Either 11 or -4. 2. Either 7 or -7. 3. Either 11 or -3. 4. Either 4 or -7

9. A number is half of $\frac{1}{3}$ rd the way from 4 to 16 on the number line. What is the number?

1. $\frac{75}{150}$ 2. $\frac{62}{31}$ 3. $\frac{240}{60}$ 4. $\frac{24}{48}$

10. Statement: 15 and 75 are factor and multiple of each other respectively.

- Conclusion: i. All the factors of 15 will divide 75.
ii. All the factors of 75 will divide 15.
iii. All the multiples of 75 are not the multiples of 15.

Options

- A. Only i is true B. Only ii is true C. All are true D. Only i and ii are true.

11. Statement: All natural numbers are whole numbers.

- Conclusion: i. All whole numbers are natural numbers.
ii. All whole numbers are not natural numbers.
iii. 0 is a natural number and a whole number too.

Options:

- A. Only i is true. B. Only ii is true C. All are correct D. Only ii and III are correct.

12. Statement 1: All co primes are twin primes.

Statement 2: All twin primes are co prime.

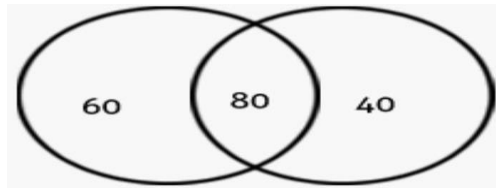
Statement 3: some twin primes are not co primes.

- A. Only statement 1 is correct B. Both statement 2 and 3 are correct
C. only statement 2 is correct D. All the statements are correct

13. In a college, 200 students are randomly selected. 140 like tea, 120 like coffee and 80 like both tea and coffee.

How many students like only tea?

How many students like only coffee?



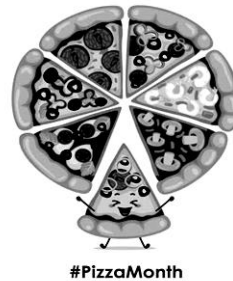
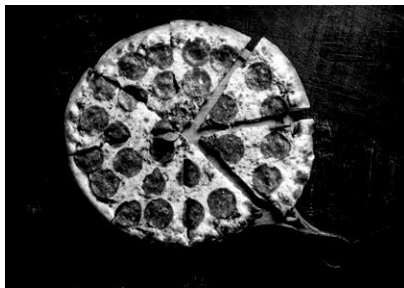
14. What would be the equivalent fraction of the sum of these given Pizza slices of all the 3 pizzas which are cut out?

A. $\frac{29}{56}$.

B. $\frac{87}{168}$.

C. $\frac{58}{112}$.

D. All of the above



15. A container holds 32 litres of liquid, if $\frac{1}{4}$ th of it is drained then find the left part of the liquid.

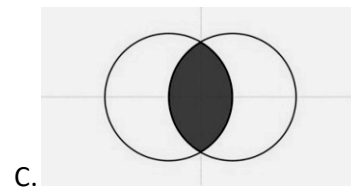
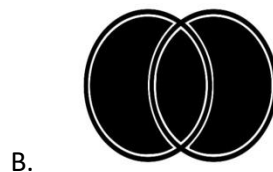
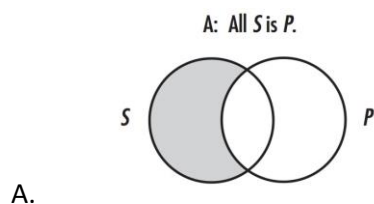
A. $\frac{36}{9} + \frac{144}{36}$.

B. Twice the smallest composite number

C. $\frac{1}{3}$ rd of the Hcf of 288 and 24.

D. All of the above

16. A library has books on physics and chemistry. 17 books cover both. 20 books cover only physics and 30 books cover only chemistry. Which diagram will properly indicate the above criteria?



D. ALL OF THE ABOVE

17. If a clock strikes 6 and 8 hours later it strikes 2 what is the sum of the numbers on the clock face?

A. 78

B. 79

C. 80

D. 77

18. How can you make 100 using the numbers 1, 3, 5 and 7?

A. $7 \times 5 \times 3 - 5 \times 1$

B. $7 + 5 \times 3 - 5 \times 3$

C. $7 \times 5 \times 1 + 5 \times 3 \times 7$

D. All of the above

19. A number is twice its inverse, what is the number?

A. 4 B. 2 C. $\frac{1}{2}$ D. 5

20. You are facing north. Turn 45° clockwise, then 90° counter clockwise. Which direction are you facing now?

A. North

B. South

C. East

D. West