# CBSE Sample Paper
# Maths Set-A
# Class 6

**Set- A Answers**

## Section - A

1. 97
2. True
3. Symbol of arc is $\overset{\frown}{}$
4. Diameter = 2 $\times$ radius
   $\therefore$ Radius = 3.56 cm
5. -22
6. XIX + XXX = 19 + 30 = 49
7. A circle is made up of four quadrants , where each quadrant is of 90 degrees. Since, the semicircle is half of the circle, so it will have two quadrants. Hence, half of a semicircle will have only one quadrant
8. Adding 1 to the integer we get the successor. So successor of -100 = -100 + 1 = -99

## Section – B

9. (-7) + (-2) = -9
   -9 < -3
10. a)Cone
    b) Sphere
11. a) 5030 > 5003

    b) 1370 > 1307
12. 

    Place value of 7 in 9,87,964 = 7000
    Face value of 7 in 9,87,964 = 7

Difference = 7000-7

= 6993

**13.** 11, 13, 17, 19

**14.** Length of the box = 5 times height

= 5h cm.

Breadth of the box = (5h – 20) cm.

**15.** (-43) - (-54) = -43 + 54 = 11

(-54) - (-43) = -54 + 43 = -11

11 > -11

(-43) - (-54) > (-54) - (-43)

**16.** a) False. It is greater 90°.

b) True.

c) False. Straight angle is equal to half of a revolution.

**Or,**

BD = 2BA + AD

= 2 × 3 + 2.5 = 6 + 2.5 = 8.5 cm

LM = 3 LP – PM

= 3 × 4 – 1.5 = 12 – 1.5 = 10.5 cm

Therefore, LM > BD

17. 1) ∠DOE, ∠EOF, ∠DOF

2) O

3) Ray OD, Ray OE, Ray OF

**18.** Given no → 438750

DIVISIBILITY BY

2 → Yes, since units place is even.

4 → No, since the number formed by last 2 digits is 50 which is not divisible by 4.

5 → Yes, since units place is 0

**19.** Number of packs of (white + blue) T-shirts bought = 3 + 5

Total number of T-shirts bought = 12 × (3 + 5) = 12 × 8 = 96

**20**. Given number is 376948

Sum of the digits at odd places (from the right) = 8+9+7 = 24

Sum of the digits at even places (from the right) = 4+6+3 = 13

Difference = 24 –13 = 11

Since the difference is divisible by 11, therefore 376948 is divisible by 11.

**Or,** Multiples of 8 are 8, 16, 24, 32, 40, 48, 56, 64, 72, ...

Multiples of 12 are 12, 24, 36, 48, 60, 72, ...

Therefore, the first three common multiples of 8 and 12 are 24, 48, and 72.

**21.** Amount collected on the first day = Rs 250 × 15 = Rs 3750
Amount collected on the next day = Rs 250 × 20 = Rs 5000
Total amount collected = Rs (3750 + 5000) = Rs 8750

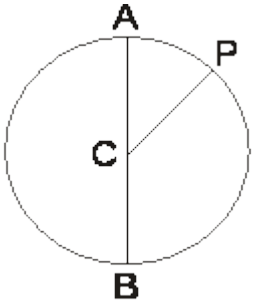
**22.** Number of votes the successful candidate registered = 4,67,350
Number of votes the rival secured = 2,18,800

Margin of votes = 4,67,350
-2,18,800
_____
2,48,550

The successful candidate won the election by a margin of 2,48,550 votes.

**23.** The total number of mangoes in a small box = r
Total number of mangoes in 2 smaller boxes = 2r
Mangoes still left = 9
So,
total number of mangoes in the larger box = (2r +9)

**24.**



From the figure, it is clear that AC = BC = PC = r

AB = AC + BC

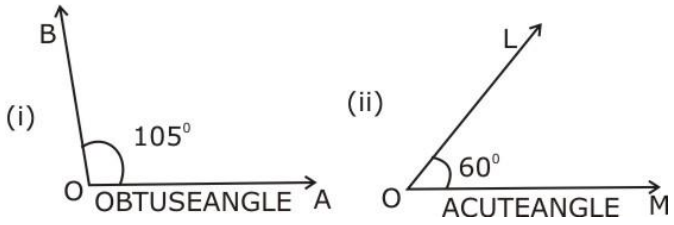
d = r + r

d = 2r.

**25.**

| Quadrilaterals | Opposite sides | | All sides Equal | Opp Angles Equal | Diagonals | |
|---|---|---|---|---|---|---|
| | Parallel | equal | | | Equal | Perpendicular |
| a)Parallelogram | √ | √ | X | √ | X | X |
| b)Rectangle | √ | √ | X | √ | √ | X |
| c)Square | √ | √ | √ | √ | √ | √ |
| d)Rhombus | √ | √ | √ | √ | X | √ |

**26.**




**27.** (i) OB, OL, OA and OC

(ii) BC

(iii) BC or DE

(iv) minor segment DE (shaded portion)

**28.** First we find the L.C.M of 6, 8, 9

| | |
|---|---|
| 2 | 6, 8,9 |
| 2 | 3, 4,9 |
| 2 | 3, 2,9 |
| 3 | 3, 1,9 |
| 3 | 1, 1,3 |
| | 1, 1,1 |

LCM = 2 × 2 × 2 × 3 × 3 = 72

Smallest 4-digit number =1000

1000 = 72 × 13 + 64
When 1000 is divided by 72, 64 is the remainder 8 needs to be added to 1000, so that it is fully divisible by 72.
∴ Required number = 1000 + 8 = 1008

Or,

First we find the L.C.M of 20, 40, and 75

| | |
|---|---|
| 2 | 20, 40, 75 |
| 2 | 10, 20, 75 |
| 2 | 5, 10 75 |
| 5 | 5, 5 75 |
| 5 | 1 1, 15 |
| 3 | 1, 1, 3 |
| | 1, 1, 1 |

LCM = 2 × 2 × 2 × 5 × 5 × 3 = 600

Least 5 digit number = 10000

```
   16
600) 10000
     600
     4000
     3600
      400
```

**29**. We have to find the H.C.F of 3675, 2100 and 1050.
H.C.F. of 3675 and 2100

```
2100) 3675(1
      2100
      1575)2100(1
           1575
            525)1575(3
                 1575
                   X
```

H.CF (3675, 2100) = 525
H.C.F of 525 and 1050
525) 1050(2
1050
X
H.C.F of 525 and 1050 = 525
The length of the tape which can measure the three dimensions of the hall exactly is 525 cm.

**30.** Population of the town = 9,75,689
After 1st year's increase= 9,75,689
+ 4563
9,80,252

After 2nd year's decrease = 9,80,252

- 8976

9,71,276

∴ Population of the town at the end of the second year = 9,71,276

**31.**

Cost of 1 black–board = Rs 450
∴ Cost of 70 black-boards = 450 X 70
= Rs 31,500
Cost of 1 chair = Rs 225
∴ Cost of 40 Chairs = 225 X 40
= Rs 9000
∴ Total amount needed to buy 70 black-boards and 40 chairs = 31,500
+ 9000

40,500

**32.**

a. - p – 8

b. q + ( p + 4 )

c. Let the no. be r. Then, required expression is 3r + 5.

d. $\frac{y}{4} + z$

**33.**

First we find the sum of $x + y^2$ and $x^2 + 2xy$

$= (x + y^2) + (x^2 + 2xy)$

$= x^2 + y^2 + 2xy + x$

Now, $(x^2 + y^2 + xy + y) - (x^2 + y^2 + 2xy + x)$

$= x^2 + y^2 + xy + y - x^2 - y^2 - 2xy - x$

$= y - xy - x.$

**34.** Product of two numbers = 504347

one number = 317

The other number can be obtained by dividing 504347 by 317.

```
     1591
317)504347
    317
    1873
    1585
     2884
     2853
       317
       317
       ×
```

Therefore, the other number =1591.