

Grade- VIII

**MATHS**

A.

1.

1 and 2 takes 2 minutes

3 and 8 take 8 minutes

4 and 4 take 4 minutes

5 and 5 take 5 minutes

Total time taken  $2+8+4+5=19$  mins

2. 34 Squares

$$3. \frac{1}{2} \left[ \frac{1}{10} \left( \frac{1}{5} \times 1000 \right) \right] = 100$$

4. 8 Kg

$$5. X = 1 \quad 11^3 = 1331$$

$$Y = 3$$

6. 20 Grams

B. Fill in the Blacks

1. Integers

2. Equations

3. Ac:bd

4. Equilateral triangle

5.  $a \neq 0$

6. 0

7. Vertical ridht

8. Constant ,

9. Diameter, circumference

10. 5

C.

1. 
$$\frac{3^n + 3^{n+1}}{3^{n+1} - 3^n} = \frac{3^n[3+1]}{3^n[3-1]} = 4/2 = 2$$

2. *Number of heaps* =  $x$   $9x$   
*Number of marbles*  $6(72 - x)$

i.e  $9x + 6(72 - x) = 480$

$x = 16$

No. of marbles with each person are 144,336

3. Width of the path = 2.5 m

Length of the side =  $x$

Side of outer square =  $x + 5$

Area of outer square = 155 sqm

Area of square lawn = area of outer square - area of path

$x^2 = (x+2)^2 - 155$

$x = 13$

Therefore Area of the square lawn = 169 sqm

4.  $\frac{11}{80}x + \frac{9}{40}\left(x - \frac{11x}{80}\right) + 56.381 =$

$x = 84.347\text{km}$

5. using unitary method we need solve

Gain percentage = 25 %