



**Application Math Exam for 2<sup>nd</sup> Sec. 2025 (December Exam)**

**Choose the correct answer from the given ones:**

1. The circumference of the circle of equation :  $x^2 + y^2 = 8$  is .....  
 (a)  $8\pi$                       (b)  $64\pi$                       (c)  $2\sqrt{2}\pi$                       (d)  $4\sqrt{2}\pi$
2. The centre of the circle :  $x^2 + y^2 - 6x + 8y = 0$  is the point .....  
 (a) (3 , -4)                      (b) (-4 , 3)                      (c) (-3 , 4)                      (d) (-3 , -4)
3. The total area of the regular faces triangular pyramid of edge length  $l =$  .....  
 (a)  $2\sqrt{3}l^2$                       (b)  $\sqrt{3}l^2$                       (c)  $3\sqrt{2}l^2$                       (d)  $4l^2$
4. A regular quadrilateral pyramid of height 9 cm. and volume  $300\text{ cm}^3$  , the length of its base side = ..... cm.  
 (a) 5                      (b) 10                      (c) 15                      (d) 20
5. The lateral area of a right cone of base radius length 6 cm. and of height 8 cm. equals .....  $\text{cm}^2$ .  
 (a)  $60\pi$                       (b)  $28\pi$                       (c)  $10\pi$                       (d)  $48\pi$
6. The equation  $x^2 + y^2 = 36$  is a circle of radius length = ..... units.  
 (a) 3                      (b) 9                      (c) 6                      (d) 18
7. The volume of a right cone its base circumference 44 cm. and its height 15 cm. = .....  $\text{cm}^3$  ( $\pi \approx \frac{22}{7}$ )  
 (a) 235                      (b) 110                      (c) 245                      (d) 770
8. A regular quadrilateral pyramid its base side length 18 cm. and its slant height 15 cm. , then its volume = .....  $\text{cm}^3$ .  
 (a) 1156                      (b) 1254                      (c) 1308                      (d) 1296



9. A right circular cone its base radius length 5 cm. and its total area  $90 \pi \text{ cm}^2$ , then its volume = .....  $\text{cm}^3$ .
- (a)  $105 \pi$                       (b)  $95 \pi$                       (c)  $100 \pi$                       (d)  $120 \pi$
10. Find the general equation of the circle of radius length 3 units and its centre lies in the first quadrant and touches the two lines  $x = 1$  ,  $y = 2$





11.

12.

