Chapter 07 Circle

1) The intersection of a cone with a plane gives

A) Point
B) Line
C) Conic Section
D) Two points

Answer: C

2) The conic sections are described today by

A) Linear Equation
B) Bi-Quadratic equations
C) Quadratic equations
D) Cubic equations

Answer: C

3) The standard conic section are

A) Circle
B) Parabola
C) Ellipse / hyperbola
D) All A, B, C

Answer: D

4) The degenerate conic sections are

A) a point
B) two coincident lines
C) a pair of lines
D) All A, B, C are true

Answer: D

5) The center of the circle represented by the equation $(x - 1)^2 + (y - 2)^2 = 4$ is

A) (0, 0)
B) (1, 1)
C) (1, 2)
D) (1, - 2)

Answer: C

6) If a body is moving with a uniform angular speed around a circular path then the linear velocity of the body is directed along

A) The circular path
B) The normal to the path
C) The tangent to the path
D) None of these

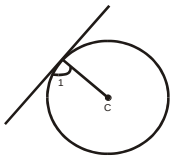
Answer: C

7) If $x^2 + y^2 = 4$ represents a circle then the point (-2, 0) lies

A) Inside the circle
B) Outside the circle
C) On the circle
D) None of these

Answer: C

8) In the figure the measure of $\angle 1$ is



A) 45^o
B) 60^o
C) 90^o
D) 120^o

Answer: C

9) The equation $3x^2 + 3y^2 - 213x + 97y + 329 = 0$ represents a

A) Line
B) Circle
C) Ellipse
D) Parabola

Answer: B

10) In the equation of a circle there is no term involving

A) x
B) y
C) xy
D) x^2

Answer: C

11) The radius of the circle, represented by the equation $x^2 + 2x + 1 + y^2 + 4y + 4 = 16$ is

A) 16
B) 8
C) 11
D) 4

Answer: D

12) The length of the diameter of the circle represented by the equation $2x^2 + 2y^2 - 8 = 0$, is

A) 8
B) 4
C) 2
D) 16

Answer: B

13) The length of the chord of the circle defined by $x^2 + 4x + 4 + y^2 + 6y + 9 = 9$, passing through the center is

A) 9
B) 3
C) 6

D) 4

Answer: C

14) The circumference of the circle represented by $x^2 + 2x + 1 + y^2 + 2y + 1 = 25$ is

A) 2π
B) 25π
C) 10π
D) 5π

Answer: C

15) The length of the chord of the circle $x^2 - 2x + 1 + y^2 - 6y + 9 = 9$ passing through the point (1, 3) is

A) 9
B) 6
C) 3
D) 18

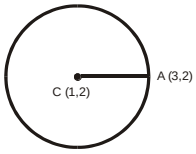
Answer: B

16) The equation of a circle is an equation of

A) Second degree in x
B) Second degree in y
C) First degree in x and y
D) Second degree in x and y

Answer: D

17) The equation of the circle given in the figure is



A) $(x + 1)^2 + (y + 2)^2 = 4$
B) $(x - 1)^2 + (y - 2)^2 = 9$
C) $(x - 1)^2 + (y - 2)^2 = 2$
D) $(x - 1)^2 + (y - 2)^2 = 4$

Answer: D

18) In the equation of a circle the coefficient of x^2 and y^2 are

A) Positive
B) Negative
C) Equal
D) Unequal

Answer: C

19) If $g^2 + f^2 - c = 0$ then the circle reduces to

A) a line
B) a point
C) two points
D) none of these

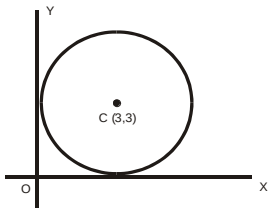
Answer: B

20) If a point P is outside the circle then from this point we can draw

A) one tangent to the circle
B) two tangents to the circle
C) three tangents to the circle
D) no tangent to the circle

Answer: B

21) The circumference of the circle given in the figure is



A) 6π
B) 9π
C) 3π
D) 12π

Answer: A