Chapter 7 Review

Directions: Complete the following sets of problems.

Find the distances between the two points given.

1. (-3, -3) and (3, 5) =
2. (7, -2) and (-9, -2) =
3. (0, 0) and (0, -17) =
4. (-2, -1) and (-2, 2) =
5. (8, 0) and (-1, -12) =

Find the center and the radius of a circle form the equations given.

6. $x^2 + y^2 = 49$
7. $x^2 + y^2 = 81$
8. $(x - 2)^2 + y^2 = 4$
9. $x^2 + (y + 1)^2 = 144$

Find the equation of the circle with the center provided and a radius *r*.

10. Center (3, -8) Radius= 5
11. Center (-3, -7) Radius= $\sqrt{3}$

Find the equation of the parabolas whose points are equal distance from the focus and the directrix given.

12. Focus (0, 2) Directrix (y = -2)

13. Focus (0, 1/2) Directrix (y = -1/2)

With the following foci given, write an equation for each ellipsis, in Standard Form.

14. Foci = (-5, 0) (5, 0) = $(x^2 / 169) + (y^2 / 144) = 1$

15. Foci = $(-\sqrt{45}, 0)$ $(\sqrt{45}, 0)$ = $(x^2 / 81) + (y^2 / 36) = 1$

With the following foci and distances or directrices given, try to write an equation for each hyperbola, in Standard Form.

16. $d_1 - d_2 = 8$, Foci = (5, 0) (-5, 0)

17. $d_1 - d_2 = 8$, Foci = $(\sqrt{34}, 0)$ $(-\sqrt{34}, 0)$

Express the following angle measures in radian form, using π.

18. – 240° =

19. 18° =

20. 135° =

21. 180° =

Express the following radian measures in degree form.

22. $-3\pi/2$ =

23. $7\pi/18$ =