

Unit 11 Review (version 2) - ANSWERS

1) 7.2

2) 12

3) $(1, -7.5)$

4) $(3, 2)$

5) $y = -\frac{1}{5}x$

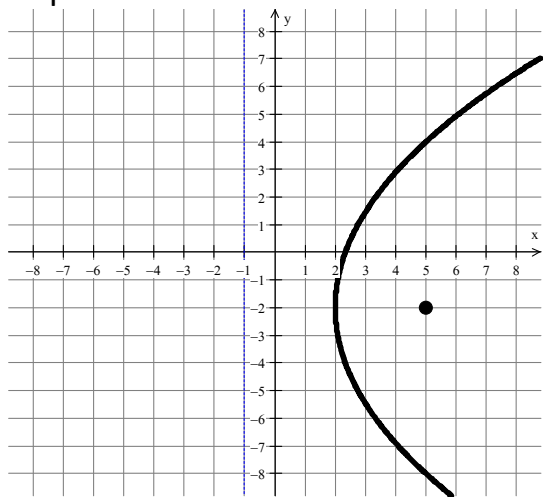
6) Coordinate of vertex: $(2, -2)$

Direction it opens: right

Axis of symmetry: $y = -2$

Coordinate of focus: $(5, -2)$

Equation for directrix: $x = -1$



7) $x^2 = 24(y - 2)$

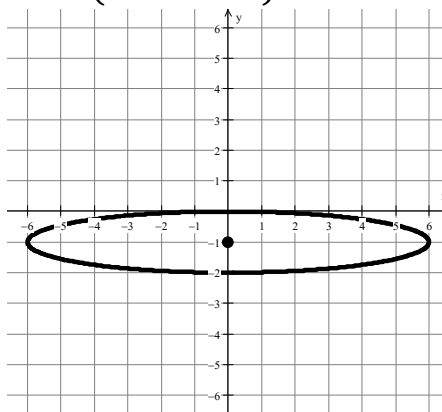
8) $(y + 8)^2 = -12(x - 2)$

9) Center: $(0, -1)$

Vertices: $(-6, -1)$ and $(6, -1)$

Co-vertices: $(0, 0)$ and $(0, -2)$

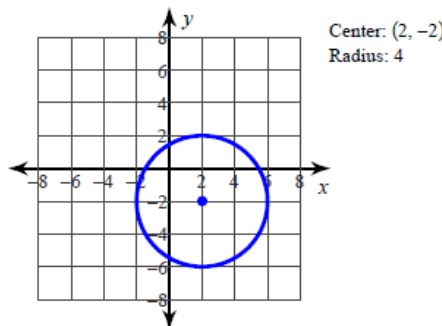
Foci: $(\pm\sqrt{35}, -1)$



10) $y - 7 = \frac{5}{7}(x + 5)$ or $y = \frac{5}{7}x + \frac{74}{7}$

11) $(x - 2)^2 + (y - 13)^2 = 9$

12)



13) $(x - 1)^2 + (y + 3)^2 = 9$

14) $(x - 9)^2 + (y - 3)^2 = 25$

15) $\frac{(x - 2)^2}{9} + \frac{(y + 8)^2}{100} = 1$

16) $\frac{(x - 10)^2}{144} + \frac{(y + 3)^2}{169} = 1$

17) $\frac{(x - 7)^2}{100} - \frac{(y + 4)^2}{4} = 1$

18) $\frac{(x + 1)^2}{49} - \frac{(y - 1)^2}{121} = 1$

19) $\frac{(x + 10)^2}{36} - \frac{(y + 1)^2}{49} = 1$

20) $\frac{(x - 2)^2}{4} - \frac{(y - 2)^2}{4} = 1$

21) Parabola
 $x = -3(y + 5)^2 - 2$

22) Hyperbola

$$\frac{y^2}{15} - \frac{x^2}{10} = 1$$

23) Circle

$$(x - 2)^2 + (y + 4)^2 = 2$$