Name: _____ Date: _____

Focus Directrix Parabola - Medium

Find the focus and the directrix of each parabola.

1. $x = \frac{1}{8} y^2$

2. $x = \frac{1}{16} y^2$

3. $y = -\frac{1}{2} x^2$

4. $y = \frac{1}{2} x^2$

5. $x = -\frac{1}{2} y^2$

6. $x = -\frac{1}{16} y^2$

7. $y = \frac{1}{4} x^2$

8. $y = -\frac{1}{16} x^2$

9. $x = -\frac{1}{8} y^2$

10. $x = -\frac{1}{12} y^2$

Name: _____ Date: _____

Fresh Math

Focus Directrix Parabola - Medium

Find the focus and the directrix of each parabola.

11. $y = \frac{1}{12}x^2$

12. $x = \frac{1}{4}y^2$

13. $x = y^2$

14. $y = -\frac{1}{8}x^2$

15. $y = x^2$

16. $y = -\frac{1}{12}x^2$

17. $y = -\frac{1}{4}x^2$

18. $x = \frac{1}{12}y^2$

19. $x = -\frac{1}{4}y^2$

20. $x = \frac{1}{2}y^2$

Focus Directrix Parabola - Medium - Answer Key

1. $x = \frac{1}{8} y^2$

   focus (2, 0); directrix x = -2

2. $x = \frac{1}{16} y^2$

   focus (4, 0); directrix x = -4

3. $y = -\frac{1}{2} x^2$

   focus (0, -1/2); directrix y = 1/2

4. $y = \frac{1}{2} x^2$

   focus (0, 1/2); directrix y = -1/2

5. $x = -\frac{1}{2} y^2$

   focus (-1/2, 0); directrix x = 1/2

6. $x = -\frac{1}{16} y^2$

   focus (-4, 0); directrix x = 4

7. $y = \frac{1}{4} x^2$

   focus (0, 1); directrix y = -1

8. $y = -\frac{1}{16} x^2$

   focus (0, -4); directrix y = 4

9. $x = -\frac{1}{8} y^2$

   focus (-2, 0); directrix x = 2

10. $x = -\frac{1}{12} y^2$

    focus (-3, 0); directrix x = 3

Focus Directrix Parabola - Medium - Answer Key

11. $y = \frac{1}{12}x^2$

focus (0, 3); directrix y = -3

12. $x = \frac{1}{4}y^2$

focus (1, 0); directrix x = -1

13. $x = y^2$

focus (1/4, 0); directrix x = -1/4

14. $y = -\frac{1}{8}x^2$

focus (0, -2); directrix y = 2

15. $y = x^2$

focus (0, 1/4); directrix y = -1/4

16. $y = -\frac{1}{12}x^2$

focus (0, -3); directrix y = 3

17. $y = -\frac{1}{4}x^2$

focus (0, -1); directrix y = 1

18. $x = \frac{1}{12}y^2$

focus (3, 0); directrix x = -3

19. $x = -\frac{1}{4}y^2$

focus (-1, 0); directrix x = 1

20. $x = \frac{1}{2}y^2$

focus (1/2, 0); directrix x = -1/2