

Name: _____ Date: _____ Period: _____

Vertex Form Scavenger Hunt

- | | |
|-----------|-----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |
| 9. _____ | 10. _____ |
| 11. _____ | 12. _____ |
| 13. _____ | 14. _____ |
| 15. _____ | 16. _____ |
| 17. _____ | 18. _____ |
| 19. _____ | 20. _____ |

Given the following equations in vertex form, indicate the vertex.

1. $y = 7(x + 9)^2 + 5$

Vertex: _____

2. $y = -4(x - 5)^2 + 14$

Vertex: _____

3. $y = 2(x + 6)^2 - 7$

Vertex: _____

4. $y = 7(x - 9)^2 + 5$

Vertex: _____

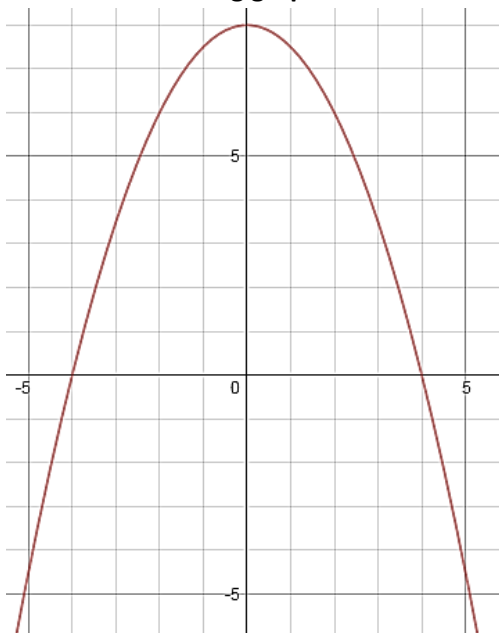
5. $y = -4(x + 5)^2 + 14$

Vertex: _____

6. $y = 2(x - 6)^2 - 7$

Vertex: _____

Given the following graphs answer the indicated questions.



7. Domain: _____

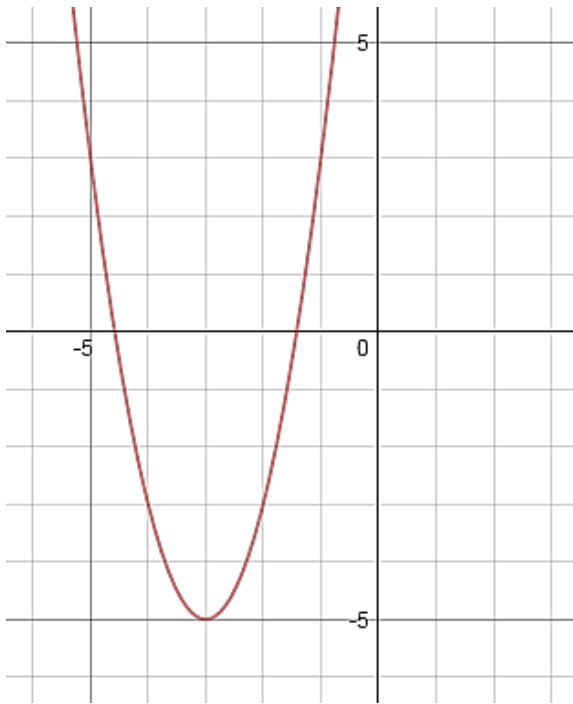
8. Range: _____

9. Vertex: _____

10. Axis of Symmetry: _____

11. Zeros: _____

12. Vertex Form ($a = -1/2$): _____



13. Domain: _____

14. Range: _____

15. Vertex: _____

16. Axis of Symmetry: _____

17. Zeros: _____

18. Vertex Form ($a = 2$): _____

Write the equation in vertex form given the vertex and the value of a .

19. $a = 2$ and the vertex is $(5, 11)$

Vertex Form: _____

20. $a = -3$ and the vertex is $(-4, 3)$

Vertex Form: _____