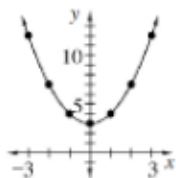


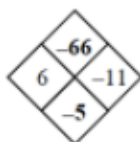
Lesson 1.1.3 Problems 1-25 thru 1-29

1-25. See graph below. The graph is a parabola opening up. There is a vertical line of symmetry through $(0, 3)$. $(0, 3)$ is the vertex and a minimum. There are no x -intercepts. The y -intercept is $(0, 3)$.



1-26. See answers in bold in diamonds below:

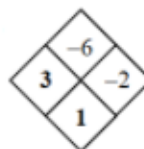
a.



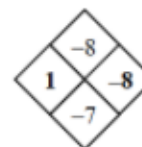
b.



c.



d.



1-27. There is only one line of symmetry: horizontal through the middle.

1-28. See below:

a. $x = 3$

b. $x = 1$

c. $x = -1.5$

d. $x = -1$

1-29. Either 15 or -15 ; yes