Section 8.4 Quadratic Functions

1. True or False: All quadratic functions have domain $(-\infty, \infty)$.

    (a) True, and I am very confident

    (b) True, but I am not very confident

    (c) False, but I am not very confident

    (d) False, and I am very confident

2. True or False: All quadratic functions have range $(-\infty, \infty)$.

    (a) True, and I am very confident

    (b) True, but I am not very confident

    (c) False, but I am not very confident

    (d) False, and I am very confident

3. True or False: All quadratic functions have at least one x-intercept.

    (a) True, and I am very confident

    (b) True, but I am not very confident

    (c) False, but I am not very confident

    (d) False, and I am very confident

4. True or False: Quadratic functions may have more than one y-intercept.

    (a) True, and I am very confident

    (b) True, but I am not very confident

    (c) False, but I am not very confident

    (d) False, and I am very confident

5. True or False: The table of data below could represent a quadratic function.

x	$f(x)$
-2	1
0	-3
1	-2
4	13

   (a) True, and I am very confident

   (b) True, but I am not very confident

   (c) False, but I am not very confident

   (d) False, and I am very confident

6. True or False: If a linear function and a quadratic function are graphed on the same coordinate axes, there must be at least one point of intersection.

   (a) True, and I am very confident

   (b) True, but I am not very confident

   (c) False, but I am not very confident

   (d) False, and I am very confident