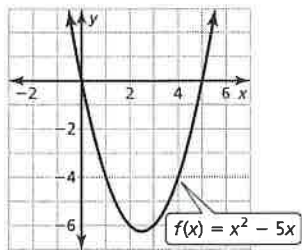


# Answers

9. two real solutions;  $x = 0$  and  $x = 5$

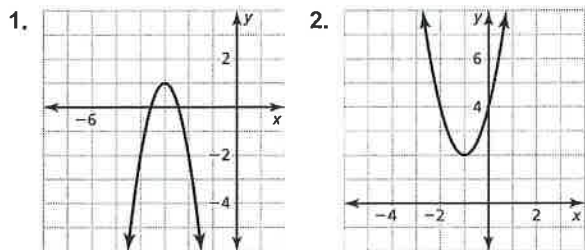


10. The average of the  $x$ -intercepts is the  $x$ -value of the vertex.

### 3.4 Puzzle Time

SOFA SO GOOD

### 3.5 Cumulative Practice



### 3.5 Prerequisite Skills Practice

- (2, -1)
- infinitely many solutions; Explanations will vary.

### 3.5 Extra Practice

- (0, -2) and (4, -2)
- (0, 6) and (-2, 2)
- no solution
- (1, 3) and (-2, -6)
- (0, -9) and (-3, 0)
- (1, 2)
- (1, -2) and (-1, -2)
- (1, 0)
- no solution
- (-3, -2) and (2, 3)
- no solution
- (-8, 32) and (2, 2)
- (-4, 24) and (-2, 12)
- (3, -8) and ( $\frac{7}{3}$ , -8)
- The horizontal line is tangent to the circle either at the top or the bottom.

### 3.5 Reteach

- (-2, -3)
- (0, 3) and (1, 2)
- (1, -1) and (4, 5)
- (1, -3) and (4, 0)

5. (1, 7) and  $(-\frac{1}{4}, 7)$

6. (0, -3)

7. (3, -8)

8. (-0.25, -7.5) and (1, -10)

9. (3, 3) and (1, 3)

### 3.5 Enrichment and Extension

- parabola;  $y = \frac{9}{4}(x - 1)^2 - 3$
- circle;  $(x - 1)^2 + (y - 1)^2 = 8$
- hyperbola;  $\frac{(x + 2)^2}{5} - \frac{(y + 3)^2}{20} = 1$
- parabola;  $y = (x + 3)^2 - 4$
- circle;  $(x + 1)^2 + (y + 3)^2 = 25$
- hyperbola;  $\frac{(x + 1)^2}{9} - \frac{(y - 2)^2}{4} = 1$

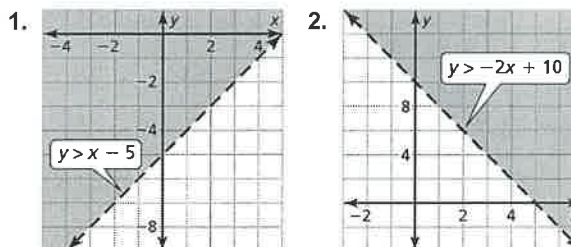
### 3.5 Puzzle Time

SPUDNIK

### 3.6 Cumulative Practice

- $g(x) = \frac{5}{4}x - \frac{7}{4}$
- $g(x) = \frac{1}{3}|3x + 7| + \frac{4}{3}$

### 3.6 Prerequisite Skills Practice



### 3.6 Extra Practice

