Which statement best explains why there is no real solution to the quadratic equation  $2x^2 + x + 7 = 0$ ?

$$2x + x + 7 = 0$$
.

- The value of  $1^2 4 \cdot 2 \cdot 7$  is positive.
- The value of  $1^2 4 \cdot 2 \cdot 7$  is equal to 0.
- The value of  $1^2 4 \cdot 2 \cdot 7$  is negative.
- The value of  $1^2 4 \cdot 2 \cdot 7$  is not a perfect square.

CSA10147



What is the solution set of the quadratic equation  $8x^2 + 2x + 1 = 0$ ?

$$\mathbf{A} \quad \left\{ -\frac{1}{2}, \frac{1}{4} \right\}$$

$$\mathbf{B} \quad \left\{-1+\sqrt{2},-1 \quad \sqrt{2}\right\}$$

$$C = \left\{ \frac{-1 + \sqrt{7}}{8}, \frac{-1 - \sqrt{7}}{8} \right\}$$

no real solution

CSA10179

What are the solutions to the equation

$$3x^2 + 3 = 7x$$
?

A 
$$x = \frac{7 + \sqrt{85}}{6}$$
 or  $x = \frac{7 - \sqrt{85}}{6}$ 

**B** 
$$x = \frac{-7 + \sqrt{85}}{6}$$
 or  $x = \frac{-7 - \sqrt{85}}{6}$ 

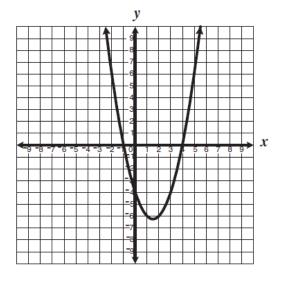
C 
$$x = \frac{7 + \sqrt{13}}{6}$$
 or  $x = \frac{7 - \sqrt{13}}{6}$ 

**D** 
$$x = \frac{-7 + \sqrt{13}}{6}$$
 or  $x = \frac{-7 - \sqrt{13}}{6}$ 

CSA00224

69

The graph of the equation  $y = x^2 - 3x - 4$  is shown below.



For what value or values of x is y = 0?

A 
$$x = -1$$
 only

**B** 
$$x = -4$$
 only

C 
$$x = -1$$
 and  $x = 4$ 

**D** 
$$x=1$$
 and  $x=-4$ 

CSA00514

## Answers

66	С
67	D
68	C
69	C