1) solve the equation by completing the square.

2x² - 7x = -12

A. $x = \frac{7 - i\sqrt{47}}{4}$, $x = \frac{7 + i\sqrt{47}}{4}$

B. x = 6, x = 1

C. x ≈ 4.8, x ≈ -1.3

D. $x = \frac{7 - i\sqrt{145}}{4}$, $x = \frac{7 + i\sqrt{145}}{4}$

2) Solve the equation by completing the square.

x² - 10x + 28 = 0

A) x ≈ 3.3, x ≈ 6.7

B) x = 5 + i√3, x = 5 − i√3

C) x ≈ 18.5, x ≈ 1.5

D) x = 10 + i√3 , x = 10 − i√3

3) Rewrite the equation so that the left side is a factored perfect square.

3x² - 4x = 2

A. $(x - \frac{2}{3})^2 = \frac{10}{9}$

B. $(x - \frac{4}{3})^2 = \frac{22}{9}$

C. $(x - \frac{2}{3})^2 = \frac{2}{9}$

D. $(x - \frac{4}{3})^2 = -\frac{10}{9}$

4)
Write an equation equivalent to the one below by writing the trinomial as a perfect square trinomial.

x² + 8x + 9 = - 9

A) $x^2 + 8x + 16 = 16$

B) $x_2 + 8x + 16 = -2$

C) $x^2 + 8x + 64 = 46$

D) $x^2 + 8x + 64 = 64$

5) Find the value of c that will make the expression a perfect square trinomial.

$x^2 + 0.6x + c$

A) 0.3

B) 0.36

C) 0.9

D) 0.09

6)
Write an equation equivalent to the one below by writing the trinomial as a perfect square trinomial.

$$2x^2 + 3x - 5 = 0$$

A.
$$2x^2 + 3x + \frac{9}{4} = \frac{29}{4}$$

B.
$$x^2 + \frac{3}{2}x + \frac{9}{16} = \frac{49}{16}$$

C.
$$x^2 + \frac{3}{2}x + \frac{9}{4} = \frac{29}{4}$$

D.
$$x^2 + \frac{3}{2}x + \frac{9}{16} = -\frac{71}{16}$$

7)
Write an equation equivalent to the one below by writing the trinomial as a perfect square trinomial.

$x^2 - 4x + 1 = 0$

A) $x^2 - 4x + 4 = -3$

B) $x^2 - 4x + 5 = 0$

C) $x^2 - 4x + 4 = 3$

D) $x^2 - 4x + 4 = 5$

8) Find the value of c that will make the expression a perfect square trinomial.

$x^2 - 15x + c$

A) -7.5

B) 7.5

C) -56.25

D) 56.25

9) Rewrite the equation by factoring the perfect square trinomial.

$x^2 + 8x + 16 = 7$

A) $(x + 4)^2 = 7$

B) $(x - 4)^2 = 7$

C) $(x + 8)^2 = 7$

D) $(x - 8)^2 = 7$

10) Rewrite the equation by factoring the perfect square trinomial.

$x^2 + 12x + 36 = 25$

A) $(x - 6)^2 = 5$

B) $(x - 6)^2 = 25$

C) $(x + 6)^2 = 25$

D) $(x + 6)^2 = 5$