Algebra 1 Unit 3B Test Review Name _____

Remember to show work!

Directions: Solve the given quadratics using the best method.

1. $x^2 - 14x - 15 = 0$	**2.** $3x^2 + 2x - 8 = 0$
3. $5x^2 + 4x - 12 = 0$	**4.** $2x^2 - 50 = 0$
5. $x^2 + 3x = 10$ **a)** $x = -2$ and $x = -5$ **b)** $x = 2$ and $x = -5$ **c)** $x = 3$ and $x = 10$ **d)** $x = 10$ and $x = -1$	**6.** $5x^2 + 10x + 5 = 0$ **a)** $x = 1$ **b)** $x = -1$ **c)** $x = 5$ **d)** $x = -10$
7. $3x^2 = 27$	**8.** $(x + 8)^2 = 32$
9. $x^2 - 4 = 5$ **a)** $x = 1$ and $x = -1$ **b)** $x = 2$ and $x = -2$ **c)** $x = 3$ and $x = -3$ **d)** $x = 4$ and $x = -4$	**10.** $x^2 - 6x + 5 = 0$ **a)** $x = -5$ and $x = -1$ **b)** $x = 7$ and $x = 1$ **c)** $x = 5$ and $x = 1$ **d)** $x = 2$ and $x = -2$
11. $x^2 + 4x - 1 = 2$	**12.** $-7x^2 - 5x + 1 = 0$

13. $x^2 - 4x - 12 = 0$

14. $x^2 + 6 = 5x$

a) $x = 6$ and $x = 4$
b) $x = 1$ and $x = -1$
c) $x = 2$ and $x = -2$
d) $x = 3$ and $x = 2$

***Error Analysis*: Find and circle the error. Then solve correctly.**

15. Solve the equation by completing the square.

$x^2 - 8x + 12 = 0$

$x^2 - 8x = 12$

$x^2 - 8x + 16 = 12$

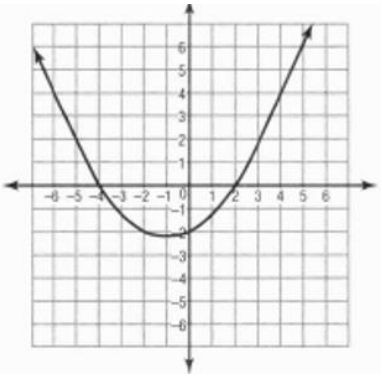
$(x - 4)^2 = 28$

$x - 4 = \sqrt{28}$

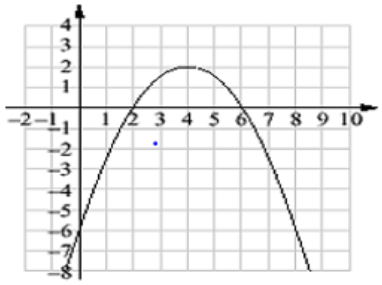
$x = 4 \pm 2\sqrt{7}$

Find the zeros of the functions graphed below

16.



17.



18. What are the solutions of $(x + 5)(x - 2) = 0$?

19. What are the solutions of $(2x - 4)(3x + 7) = 0$?

a) $x = -2$ and $x = -7$

b) $x = 2$ and $x = -\frac{7}{3}$

c) $x = -4$ and $x = \frac{7}{3}$

d) $x = 2$ and $x = -2$