## Algebra I Practice A.REI.B.4: Solving Quadratics 6 www.jmap.org

NAME:

Solve:

1. 
$$x^2 + x - 30 = 0$$

$$[A] -6, 5$$

$$[B] -5, 6$$

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

$$[A] -4, 2$$

$$[A] -4, 2$$
  $[B] -2, 4$   $[C] -4, -2$   $[D] 4, 2$ 

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

$$[B] -1, 2$$

4. 
$$x^2 + 2x - 3 = 0$$

$$[D] -3, -$$

5. 
$$x^2 - x - 20 = 0$$

$$[B] -5, 4$$

$$[D] -4, -$$

6. 
$$x^2 + 3x - 10 = 0$$

$$[A] -5, 2$$

$$[B] -2, 3$$

[A] 
$$-5, 2$$
 [B]  $-2, 5$  [C]  $-5, -2$  [D]  $5, 2$ 

7. 
$$x^2 + 7x - 8 = 0$$

8. 
$$x^2 - x - 6 = 0$$

9. 
$$x^2 + 8x + 15 = 0$$

10. 
$$x^2 + 5x - 6 = 0$$

11. 
$$x^2 + 3x - 54 = 0$$

12. 
$$x^2 - 12x + 32 = 0$$

13. 
$$49x = x^2$$

$$R1 - 7 7$$

14. 
$$64x = x^2$$

$$[A] -8, 8$$

$$[B]$$
 0

15. Which are the solutions to 
$$x^2 + 9x = 36$$
?

[A] 
$$x = -12$$
,  $x = 3$  [B]  $x = 4$ ,  $x = 9$ 

[B] 
$$x = 4$$
,  $x = 9$ 

[C] 
$$x = 12$$
,  $x = -3$  [D]  $x = -4$ ,  $x = 9$ 

[D] 
$$x = -4$$
,  $x = 9$ 

16. Compare the quantity in Column A with the quantity in Column B.

## Column A

Column B

the sum of the solutions of the solutions of

$$x^2 - 6x = 7$$

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

- [A] The quantity in Column A is greater.
- [B] The quantity in Column B is greater.

- [C] The two quantities are equal.
- [D] The relationship cannot be determined on the basis of the information supplied.
- 17. Compare the quantity in Column A with the quantity in Column B.

Column A

Column B

the greater solution of

the greater solution of

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

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

- [A] The quantity in Column A is greater.
- [B] The quantity in Column B is greater.

- [C] The two quantities are equal.
- [D] The relationship cannot be determined on the basis of the information supplied.

- [1] A
- [2] <u>A</u>
- [3] <u>C</u>
- [4] B
- [5] <u>C</u>
- [6] A
- [7] -8, 1
- [8] \_2, 3
- [9] -5, -3
- [10] -6, 1
- [11] -9, 6
- [12] 4, 8
- [13] <u>A</u>
- [14] B
- [15] A
- [16] A
- [17] <u>A</u>