Alg I Week10 Mon   Warm Up

1. Skill 16: Solve a quadratic equation by factoring.

$$6x^2 = -23x - 21$$

Test block day!

2. Skill 17: Completing the Square. Leave answer in simplified radical form or as an integer.

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

3. Skill 18: Solve a quadratic equation using the quadratic formula

a) give answer in simplified radical form   b) round answer to the nearest hundredth

$$4x^2 - 6x = 14$$

3. Find the discriminant and state the number of solutions for the equation.

$$2x^2 + 11x = -4$$

4. Solve by "unsquaring".

$$5k^2 - 3 = 42$$

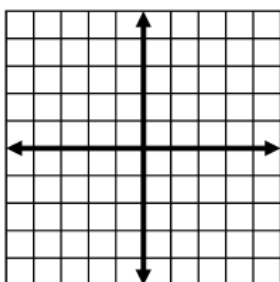Mon wk 10   Chp 8/9 Test Review #2   Name_____

1. Complete the table below, then graph the function .

a) $y = x^2 - 4$

State the vertex:_____

State the axis of symmetry:_____

x	$x^2 - 4$	y

What are the zeros (roots)? State them as ordered pairs (x,y).

2. **Solve by unsquaring.** Leave answers in simplified radical form, if necessary.

a) $x^2 - 8 = 17$

3. Solve by factoring.

a) $6x^2 = x + 2$

4. **Solve by completing the square.** Leave answers in simplified radical form, if necessary.

a) $x^2 + 2x + 9 = 16$

5. **Solve by the quadratic formula** Leave answers in simplified radical form, if necessary.

a) $3x^2 + 12 = 14x$

Mon wk 10   **Chp 8/9 Test Review #2**   Name_____

6. **Solve by the algebraic method of your choice.**   Leave answers in simplified radical form, if necessary.

a) $4x^2 + 3 = 8x$

b) $x^2 + 6x = 5$

c) $(x - 4)^2 - 1 = 23$

8) **Multiply. Put in standard form.**

a) $(4x - 5)(3x^2 + 3x - 2)$

9) **Factor** $6x^2 - 11x + 3$

10) **Simplify each radical.** Show **ALL** work.

a) $\sqrt{52}$ b) $\sqrt{32}$

11) **Add or subtract, then put in standard form.**

$a)$ $(3x^2 + 4x - 2) + (8x - 9x^2 - 5x^3)$

12) **Find the value of the DISCRIMINANT.** Then, state the number of solutions.

$a)$ $2x^2 - x - 3 = 0$

Discriminant:_____   # of solutions:_____

$a)$ $x^2 = 4 - 4x$

Discriminant:_____   # of solutions:_____

$a)$ $5x^2 = 2x - 10$

Discriminant:_____   # of solutions:_____

REVIEW:

13) Solve $\dfrac{4x-5}{3} = \dfrac{2x+1}{2}$