

FACTORING

VS.

QUADRATIC FORMULA

1  $x^2 - 8x = 33$   
 $x^2 - 8x - 33 = 0$   
 $(x - 11)(x + 3) = 0$   
 $x = 11, -3$

Your Answer: 11, -3  
 Your Partner's Answer: \_\_\_\_\_

2  
 Your Answer: 4, -4  
 Your Partner's Answer: \_\_\_\_\_

$5x^2 - 60 = 20$   
 $5x^2 - 80 = 0$   
 $a = 5$   $b = 0$   $c = -80$   
 $0 \pm \frac{\sqrt{0^2 - 4(5)(-80)}}{2(5)}$   
 $\pm \frac{\sqrt{1600}}{10}$   
 $\pm \frac{40}{10} \rightarrow -4$

3  $6x^2 + 19x + 4 = 2x - 1$   
 $6x^2 + 17x + 5 = 0$   
 $(2x + 5)(3x + 1) = 0$   
 $x = -5/2$   
 $x = -1/3$

Your Answer: -1/3, -5/2  
 Your Partner's Answer: \_\_\_\_\_

4  
 Your Answer: 7, 2  
 Your Partner's Answer: \_\_\_\_\_

$x^2 + 14 = 9x$   
 $x^2 - 9x + 14 = 0$   
 $x = \frac{9 \pm \sqrt{(-9)^2 - 4(1)(14)}}{2}$   
 $x = \frac{9 \pm \sqrt{81 - 56}}{2}$   
 $x = \frac{9 \pm \sqrt{25}}{2} \rightarrow x = \frac{9+5}{2} = 7$   
 $x = \frac{9-5}{2} = 2$

5  $12x^2 = 18x$   
 $12x^2 - 18x = 0$   
 $6x(2x - 3) = 0$   
 $x = 0$   
 $x = 3/2$

Your Answer: 0, 3/2  
 Your Partner's Answer: \_\_\_\_\_

6

Your Answer: \_\_\_\_\_

4, 5

Your Partner's Answer: \_\_\_\_\_

$$3x^2 - 27x + 75 = 15$$

$$3x^2 - 27x + 60 = 0$$

$$3(x^2 - 9x + 20) = 0$$

$$3(x^2 - 5)(x - 4) = 0$$

7

$$5x^2 + 9x = 2$$

$$5x^2 + 9x - 2 = 0$$

$$(5x - 1)(x + 2)$$

Your Answer: \_\_\_\_\_

-2, -1/5

Your Partner's Answer: \_\_\_\_\_

8

Your Answer: \_\_\_\_\_

 $x = \pm 7/2$ 

Your Partner's Answer: \_\_\_\_\_

$$4x^2 - 39 = 10$$

$$4x^2 - 49 = 0$$

$$(2x - 7)(2x + 7)$$

9

$$x^2 = 16x - 64$$

$$x^2 - 16x + 64 = 0$$

$$(x - 8)(x - 8) = 0$$

Your Answer: \_\_\_\_\_

8

Your Partner's Answer: \_\_\_\_\_

10

Your Answer: \_\_\_\_\_

1/4, -5/3

Your Partner's Answer: \_\_\_\_\_

$$12x^2 + 18x = x + 5$$

$$12x^2 + 17x - 5 = 0$$

$$(4x - 1)(3x + 5) = 0$$