

Algebra 1 Honors Unit 1: Linear Equations and Functions Date: \_\_\_\_\_

Unit 1: Linear Equations and Functions Page: \_\_\_\_\_

$(2x+3)^2 - (x-1)^2 = 16$   
 $(2x+3)(2x+3) - (x-1)(x-1) = 16$

$(2x+3)(2x+3) - (x-1)(x-1) = 16$

$(2x+3)(2x+3) - (x-1)(x-1) = 16$   
 $4x^2 + 12x + 9 - (x^2 - 2x + 1) = 16$   
 $4x^2 + 12x + 9 - x^2 + 2x - 1 = 16$   
 $3x^2 + 14x + 8 = 16$

$(2x+3)(2x+3) - (x-1)(x-1) = 16$   
 $4x^2 + 12x + 9 - (x^2 - 2x + 1) = 16$   
 $4x^2 + 12x + 9 - x^2 + 2x - 1 = 16$   
 $3x^2 + 14x + 8 = 16$

$3x^2 + 14x + 8 = 16$   
 $3x^2 + 14x - 8 = 0$

$3x^2 + 14x + 8 = 16$   
 $3x^2 + 14x - 8 = 0$

$3x^2 + 14x - 8 = 0$   
 $(3x-2)(x+4) = 0$

$3x^2 + 14x - 8 = 0$   
 $(3x-2)(x+4) = 0$

Factor the quadratic equation

Factor the quadratic equation

$3x^2 + 14x - 8 = 0$   
 $(3x-2)(x+4) = 0$   
 $3x-2 = 0$   
 $3x = 2$   
 $x = \frac{2}{3}$

$3x^2 + 14x - 8 = 0$   
 $(3x-2)(x+4) = 0$   
 $x+4 = 0$   
 $x = -4$

$3x^2 + 14x - 8 = 0$   
 $(3x-2)(x+4) = 0$   
 $3x-2 = 0$   
 $3x = 2$   
 $x = \frac{2}{3}$

$3x^2 + 14x - 8 = 0$   
 $(3x-2)(x+4) = 0$   
 $3x-2 = 0$   
 $3x = 2$   
 $x = \frac{2}{3}$

$3x^2 + 14x - 8 = 0$   
 $(3x-2)(x+4) = 0$   
 $x+4 = 0$   
 $x = -4$

$3x^2 + 14x - 8 = 0$   
 $(3x-2)(x+4) = 0$   
 $3x-2 = 0$   
 $3x = 2$   
 $x = \frac{2}{3}$   
 $(3x-2)(x+4) = 0$   
 $x+4 = 0$   
 $x = -4$   
 $x = \frac{2}{3}, -4$

$3x^2 + 14x - 8 = 0$   
 $(3x-2)(x+4) = 0$   
 $3x-2 = 0$   
 $3x = 2$   
 $x = \frac{2}{3}$   
 $(3x-2)(x+4) = 0$   
 $x+4 = 0$   
 $x = -4$   
 $x = \frac{2}{3}, -4$