Turn in extra credit right now!!!

### **Warm-up Wednesday**

1 4 sin<sup>2</sup> x-1 = 0 x ∈ [0,211)  

$$\sqrt{\sin^2 x} = \sqrt{\frac{1}{4}}$$
 x equiahs

#### ABOUT ME:

- 1. Would you rather be 4'5" or 7'7"?
- 2. Would you rather live in Antarctica or the Sahara?

EQ: How do I solve an equation by factoring?

### **Common Factors**

- 1. 42+34 = 7 (4+3)
- 2. 45x+10y = 5(9x+2y)
- 3.6x24-4x4+34= 4(6x2-4x+3)

How do I solve an equation by factoring?

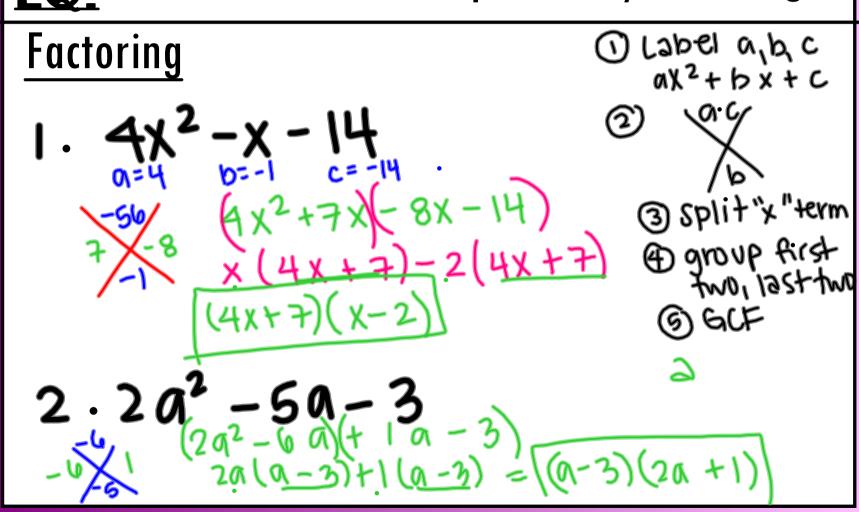
Difference of Squares 
$$a^2-b^2=(a+b)(a-b)$$

1. 
$$X^2 - 64 = (X - 8)(X + 8)$$

2. 
$$x^2 - y^2 = (x - y)(x + y)$$

3. 
$$X^{6} - Y^{6}$$
  
 $(X^{3})^{2} - (Y^{3})^{2} = (X^{3} - Y^{3})(X^{3} + Y^{3})$ 

**EQ**: How do I solve an equation by factoring?

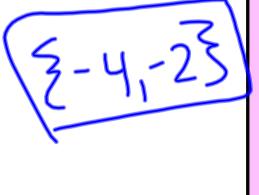


**EQ**: How do I solve an equation by factoring?

Zero Product Property

1. 
$$ab = 0$$
  
either a or  $b = 0$ 

2. 
$$x^{2} + 0x + 8 = 0$$
  
 $x^{8} = 0$   
 $x^{8} = 0$   
 $x^{8} = 0$   
 $x^{4} = 0$   
 $x^{4} = 0$   
 $x^{4} = 0$   
 $x^{4} = 0$ 



**EQ**: How do I solve an equation by factoring?

**CLOSING** 

solve for x

 $3x^2 - 14x - 5 = 0$