

# EXIT TICKET:

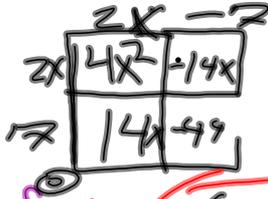
Name \_\_\_\_\_ Per \_\_\_\_\_

ENTRANCE

Factor: AND SOLVE :

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

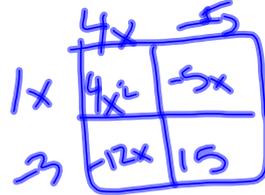
b.  $4x^2 - 17x + 15 = 0$



Solutions:

$x = -\frac{7}{2}$   $x = \frac{7}{2}$

factors:  $(2x-7)(2x+7) = 0$



factors:  $(4x-5)(x-3)$

Solutions:  $(2x-7)=0$   
 $x = \frac{7}{2}$

Solutions:  $(2x+7)=0$   
 $x = -\frac{7}{2}$

Solutions:  $x = 1.25$   $x = 3$

#12 - 16: Solve the following problems.

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12)  $\sqrt{72} = 72$   
 $X = \pm\sqrt{72}$   
 $X = \pm\sqrt{36 \cdot 2}$   
 $X = \pm\sqrt{36}\sqrt{2}$   
 $X = \pm 6\sqrt{2}$

$X = 6\sqrt{2}$   $X = -6\sqrt{2}$

13)  $x^2 - 18 = 0$   
 $+18 +18$   
 $3x^2 = 18$   
 $\frac{3}{3} = \frac{18}{3}$   
 $x^2 = 6$   
 $x = \pm\sqrt{6}$

$X = \sqrt{6}$   $X = -\sqrt{6}$

14)  $\sqrt{(2x-3)^2} = 16$   
 $2x-3 = \pm 4$   
 $2x-3 = 4$        $2x-3 = -4$   
 $+3 +3$              $+3 +3$   
 $2x = 7$              $2x = -1$   
 $\frac{2}{2} = \frac{7}{2}$              $\frac{2}{2} = \frac{-1}{2}$   
 $x = \frac{7}{2}$              $x = -\frac{1}{2}$

16)  $(x+5)^2 - 4 = 32$   
 $+4 +4$   
 $\sqrt{(x+5)^2} = \sqrt{36}$   
 $x+5 = \pm 6$   
 $x+5 = 6$        $x+5 = -6$   
 $-5 -5$              $-5 -5$

$X = 1$        $X = -11$

15)  $x^2 - 78 = -29$   
 $+78 +78$   
 $4x^2 = 49$   
 $\frac{4}{4} = \frac{49}{4}$   
 $x^2 = \frac{49}{4}$   
 $x = \pm\frac{7}{2}$

understanding  $\pm$   
 $x^2 = 36$  solve  
 $x = 6$        $x = -6$   
 check:      check:  
 $(6)^2 = 36 \checkmark$        $(-6)^2 = 36 \checkmark$

# HOMEWORK:

Jan. 23	5.2	I can factor quadratic expressions	<del>5.2A</del> (P-9)	13, 18, 20, 22 24, 27, 31	☺	☹	☹	
Jan. 26		I can solve quadratic equations by factoring	5.2B <del>10-12</del> (P-12)		☺	☹	☹	
Jan. 27			5.2B <del>10-12</del> (P-12)	13, 15, 17				
Jan. 28			<del>5.2C</del> <del>11-16</del> (P-13)	white worksheet	☺	☹	☹	
Jan. 30		I can simplify radical expressions	5.2D #1, (P-15)		☺	☹	☹	
Feb. 3		I can solve quadratic equations using square roots to find <i>rational</i> solutions	5.2E #1 (P-19)	#1, 2, 3	NEW TODAY	☺	☹	☹
		I can solve quadratic equations using square roots to find <i>real</i> solutions	5.2F #7 - 15 odd (P-21)			☺	☹	☹
Feb. 2		I can simplify expressions involving	<del>5.2G</del> <del>17-20</del> (P-25)	blue worksheet		☺	☹	☹