4/9/09

Thinking ahead and analyzing problems
WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM

1. Factor: $x^2 - 7x + 10$

2. Find the *x*-intercepts of $y = x^2 - 7x + 10$

3. What are the roots of $y = (x-5)(x-2)$?

4. Solve for *x*:
   $x^2 - 7x = -10$

5. (5, 0) and (2, 0) are the *x*-intercepts of the parabola $y = x^2 - 7x + 10$. What is the vertex?

6. Factor completely: $3x^2 - 9x - 12$

FIRST STEP

$0 = (x-5)(x-2)$

$y = x^2 - 7x + 10$

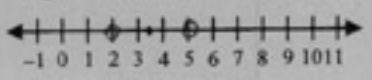
$x^2 - 7x = -10$
$+10 \quad +10$

$\frac{5+2}{2} = 3.5$

$0 = x^2 - 7x + 10$

	x	
x	x^2	
		10

	x^2	$-3x$	-4
3	$3x^2$	$-9x$	-12



$x = \frac{9 \pm \sqrt{(-9)^2 - 4(3)(-12)}}{2(3)}$

Thinking ahead and analyzing problems

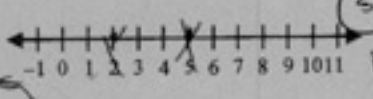
WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM

1. Factor: $x^2 - 7x + 10$
2. Find the x-intercepts of $y = x^2 - 7x + 10$
3. What are the roots of $y = (x-5)(x-2)$?
4. Solve for x: $x^2 - 7x = -10$
5. (5, 0) and (2, 0) are the x-intercepts of the parabola $y = x^2 - 7x + 10$. What is the vertex?
6. Factor completely: $3x^2 - 9x - 12$

FIRST STEP

6. $0 = (x-5)(x-2)$
5. $y = x^2 - 7x + 10$
4. $x^2 - 7x = -10$
$+10 \quad +10$
$\frac{5+2}{2} = 3.5$
2. $0 = x^2 - 7x + 10$
1. x / x: x^2 | | / | | 10
3. 3 | $3x^2$ | $-9x$ | -12
3. 

$x = \frac{9 \pm \sqrt{(-9)^2 - 4(3)(-12)}}{2(3)}$

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

4-10-09
Block 1-3-Day

Thinking ahead and analyzing problems
WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM

0. Factor: $x^2 - 7x + 10$

7. Find the x-intercepts of $y = x^2 - 7x + 10$

3. What are the roots of $y = (x-5)(x-2)$?

4. Solve for x:
$x^2 - 7x = -10$

5. (5, 0) and (2, 0) are the x-intercepts of the parabola $y = x^2 - 7x + 10$. What is the vertex?

6. Factor completely: $3x^2 - 9x - 12$

FIRST STEP

6. $0 = (x-5)(x-2)$

5. $y = x^2 - 7x + 10$

1. $x^2 - 7x = -10$
$+10 \quad +10$

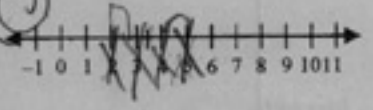
$\frac{5+2}{2} = 3.5$

$0 = x^2 - 7x + 10$

0.

	x	
x	x^2	
		10

	x		
3	$3x^2$	$-9x$	-12

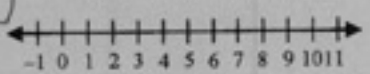
3. 

2. $x = \frac{9 \pm \sqrt{(-9)^2 - 4(3)(-12)}}{2(3)}$

Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2-7x+10$	$0=(x-5)(x-2)$
Find the x-intercepts of $y=x^2-7x+10$	$y=x^2-7x+10$
What are the roots of $y=(x-5)(x-2)$?	$x^2-7x=-10$ $+10 \quad +10$
Solve for x: $x^2-7x=-10$	$\frac{5+2}{2}=3.5$
(5, 0) and (2, 0) are the x-intercepts of the parabola $y=x^2-7x+10$. What is the vertex?	$0=x^2-7x+10$
Factor completely: $3x^2-9x-12$	x / x: x^2, blank / blank, 10
	3: $3x^2$, $-9x$, -12
	
	$x=\frac{9\pm\sqrt{(-9)^2-4(3)(-12)}}{2(3)}$

4/10/09
Block 1 - (B DAY)

Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2 - 7x + 10$	$0 = (x-5)(x-2)$
Find the x-intercepts of $y = x^2 - 7x + 10$	$y = x^2 - 7x + 10$
What are the roots of $y = (x-5)(x-2)$?	$x^2 - 7x = -10$ $+10 \quad +10$
Solve for x: $x^2 - 7x = -10$	$\frac{5+2}{2} = 3.5$
(5, 0) and (2, 0) are the x-intercepts of the parabola $y = x^2 - 7x + 10$. What is the vertex?	$0 = x^2 - 7x + 10$
Factor completely: $3x^2 - 9x - 12$	x / x / x^2 / 10
	3 / $3x^2$ / $-9x$ / -12
	-1 0 1 2 3 4 5 6 7 8 9 10 11
	$x = \frac{9 \pm \sqrt{(-9)^2 - 4(3)(-12)}}{2(3)}$

Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2 - 7x + 10$	$0 = (x-5)(x-2)$
Find the x-intercepts of $y = x^2 - 7x + 10$	$y = x^2 - 7x + 10$
What are the roots of $y = (x-5)(x-2)$?	$x^2 - 7x = -10$ $+10 \quad +10$
Solve for x: $x^2 - 7x = -10$	$\frac{5+2}{2} = 3.5$
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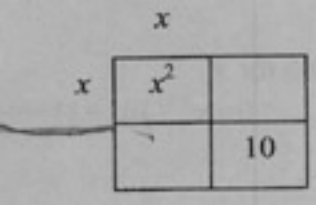
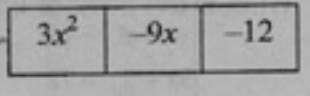
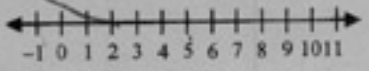
Factor completely: $3x^2 - 9x - 12$	$x = \frac{9 \pm \sqrt{(-9)^2 - 4(3)(-12)}}{2(3)}$







Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2 - 7x + 10$	$0 = (x-5)(x-2)$
Find the x-intercepts of $y = x^2 - 7x + 10$	$y = x^2 - 7x + 10$
What are the roots of $y = (x-5)(x-2)$?	$x^2 - 7x = -10$ $+10 \quad +10$
Solve for x: $x^2 - 7x = -10$	$\frac{5+2}{2} = 3.5$
(5, 0) and (2, 0) are the x-intercepts of the parabola $y = x^2 - 7x + 10$. What is the vertex?	$0 = x^2 - 7x + 10$
Factor completely: $3x^2 - 9x - 12$	x / x / x^2 / 10
	3 / $3x^2$ / $-9x$ / -12
	-1 0 1 2 3 4 5 6 7 8 9 10 11
	$x = \frac{9 \pm \sqrt{(-9)^2 - 4(3)(-12)}}{2(3)}$

Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

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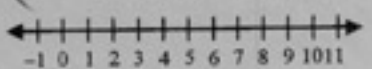
(5, 0) and (2, 0) are the x-intercepts of the parabola $y = x^2 - 7x + 10$. What is the vertex?	$0 = x^2 - 7x + 10$
Factor completely: $3x^2 - 9x - 12$	$x =$ $\frac{9 \pm \sqrt{(-9)^2 - 4(3)(-12)}}{2(3)}$

	x	
x	x^2	
		10

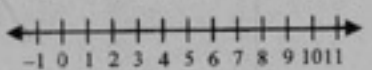
3	$3x^2$	$-9x$	-12



Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2-7x+10$	$0=(x-5)(x-2)$
Find the x-intercepts of $y=x^2-7x+10$	$y=x^2-7x+10$
What are the roots of $y=(x-5)(x-2)$?	$x^2-7x=-10$ $+10 \quad +10$
Solve for x: $x^2-7x=-10$	$\frac{5+2}{2}=3.5$
(5, 0) and (2, 0) are the x-intercepts of the parabola $y=x^2-7x+10$. What is the vertex?	$0=x^2-7x+10$
Factor completely: $3x^2-9x-12$	x / x / x^2 / 10
	3 / $3x^2$ / $-9x$ / -12
	
	$x=\frac{9\pm\sqrt{(-9)^2-4(3)(-12)}}{2(3)}$

Thinking ahead and analyzing problems

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Match each problem to the first step you would take to solve it:

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	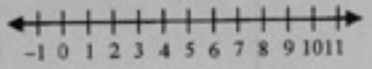
	$x=\frac{9\pm\sqrt{(-9)^2-4(3)(-12)}}{2(3)}$

Thinking ahead and analyzing problems

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Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2 - 7x + 10$	$0 = (x-5)(x-2)$
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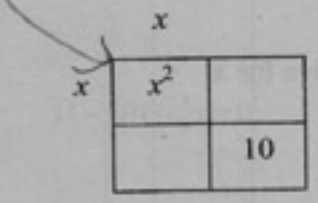
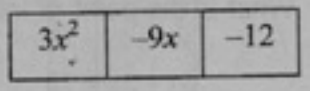
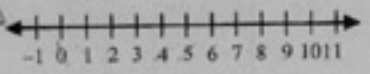
(5, 0) and (2, 0) are the x-intercepts of the parabola $y = x^2 - 7x + 10$. What is the vertex?	$0 = x^2 - 7x + 10$
Factor completely: $3x^2 - 9x - 12$	$x = \frac{9 \pm \sqrt{(-9)^2 - 4(3)(-12)}}{2(3)}$







Thinking ahead and analyzing problems

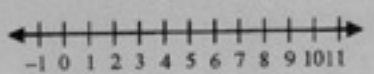
WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2 - 7x + 10$	$0 = (x-5)(x-2)$
Find the x-intercepts of $y = x^2 - 7x + 10$	$y = x^2 - 7x + 10$
What are the roots of $y = (x-5)(x-2)$	$x^2 - 7x = -10$ $+10 \quad +10$
Solve for x: $x^2 - 7x = -10$	$\frac{5+2}{2} = 3.5$
(5, 0) and (2, 0) are the x-intercepts of the parabola $y = x^2 - 7x + 10$. What is the vertex?	$0 = x^2 - 7x + 10$
Factor completely: $3x^2 - 9x - 12$	$x = \frac{9 \pm \sqrt{(-9)^2 - 4(3)(-12)}}{2(3)}$

	x	
x	x^2	
		10

3	$3x^2$	$-9x$	-12



Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM

(A) Factor: $x^2 - 7x + 10$

(b) Find the x-intercepts of $y = x^2 - 7x + 10$

(c) What are the roots of $y = (x-5)(x-2)$?

(d) Solve for x:
$x^2 - 7x = -10$

(e) (5, 0) and (2, 0) are the x-intercepts of the parabola $y = x^2 - 7x + 10$. What is the vertex?

(f) Factor completely: $3x^2 - 9x - 12$

FIRST STEP

$0 = (x-5)(x-2)$

$y = x^2 - 7x + 10$

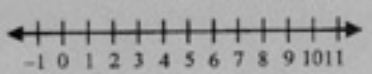
$x^2 - 7x = -10$
$+10 \quad +10$

$\frac{5+2}{2} = 3.5$

$0 = x^2 - 7x + 10$

x	x
x	x^2	
	10

3			
	$3x^2$	$-9x$	-12

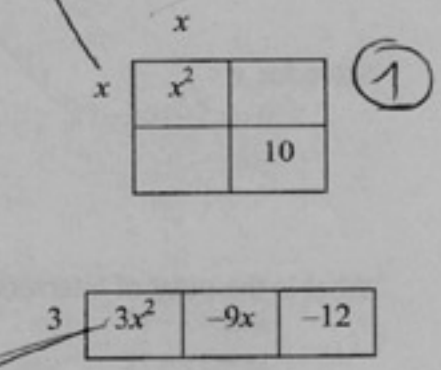


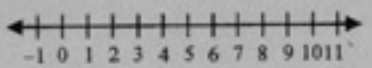
$$x = \frac{9 \pm \sqrt{(-9)^2 - 4(3)(-12)}}{2(3)}$$

Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
(1) Factor: $x^2-7x+10$	$0=(x-5)(x-2)$
Find the x-intercepts of $y=x^2-7x+10$	$y=x^2-7x+10$
What are the roots of $y=(x-5)(x-2)$?	$x^2-7x=-10$ $+10 \quad +10$
Solve for x: $x^2-7x=-10$	$\frac{5+2}{2}=3.5$
(5, 0) and (2, 0) are the x-intercepts of the parabola $y=x^2-7x+10$. What is the vertex?	$0=x^2-7x+10$
Factor completely: $3x^2-9x-12$	



$$x=\frac{9\pm\sqrt{(-9)^2-4(3)(-12)}}{2(3)}$$

Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2-7x+10$	$0=(x-5)(x-2)$
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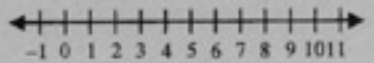
Factor completely: $3x^2-9x-12$	x / x: x^2 | ; ; 10
	3 | $3x^2$ | $-9x$ | -12
	
	$x=\frac{9\pm\sqrt{(-9)^2-4(3)(-12)}}{2(3)}$

April 10, 09

Thinking ahead and analyzing problems
WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2-7x+10$	$0=(x-5)(x-2)$
Find the x-intercepts of $y=x^2-7x+10$	$y=x^2-7x+10$
What are the roots of $y=(x-5)(x-2)$?	$x^2-7x=-10$ $+10 \quad +10$
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	-1 0 1 2 3 4 5 6 7 8 9 10 11
	$x=\frac{9\pm\sqrt{(-9)^2-4(3)(-12)}}{2(3)}$

Thinking ahead and analyzing problems

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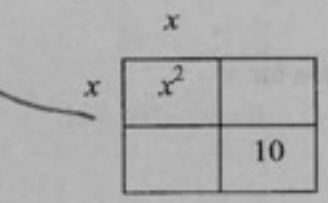
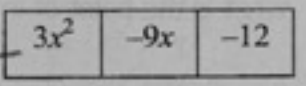
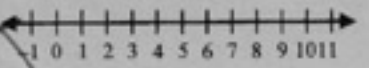






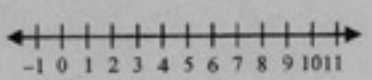
Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2-7x+10$	$0=(x-5)(x-2)$
Find the x-intercepts of $y=x^2-7x+10$	$y=x^2-7x+10$
What are the roots of $y=(x-5)(x-2)$?	$x^2-7x=-10$ $+10 \quad +10$
Solve for x: $x^2-7x=-10$	$\frac{5+2}{2}=3.5$
(5, 0) and (2, 0) are the x-intercepts of the parabola $y=x^2-7x+10$. What is the vertex?	$=x^2-7x+10$
Factor completely: $3x^2-9x-12$	x / x / x^2 / 10
	3 / $3x^2$ / $-9x$ / -12
	$x=\frac{9\pm\sqrt{(-9)^2-4(3)(-12)}}{2(3)}$

$(x-5)(x-2)$



Thinking ahead and analyzing problems

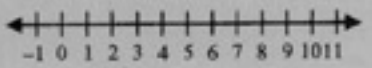
WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2-7x+10$	$0=(x-5)(x-2)$
Find the *x*-intercepts of $y=x^2-7x+10$	$y=x^2-7x+10$
What are the roots of $y=(x-5)(x-2)$?	$x^2-7x=-10$ $+10 \quad +10$
Solve for *x*: $x^2-7x=-10$	$\frac{5+2}{2}=3.5$
(5, 0) and (2, 0) are the *x*-intercepts of the parabola $y=x^2-7x+10$. What is the vertex?	$0=x^2-7x+10$
Factor completely: $3x^2-9x-12$	$x=\frac{9\pm\sqrt{(-9)^2-4(3)(-12)}}{2(3)}$

	x	
x	x^2	
		10

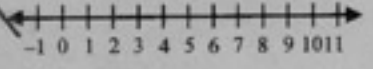
3	$3x^2$	$-9x$	-12



Thinking ahead and analyzing p

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
Factor: $x^2-7x+10$	$0=(x-5)(x-2)$
Find the x-intercepts of $y=x^2-7x+10$	$y=x^2-7x+10$
What are the roots of $y=(x-5)(x-2)$?	$x^2-7x=-10$ $+10 \quad +10$
Solve for x: $x^2-7x=-10$	$\frac{5+2}{2}=3.5$
	$0=x^2-7x+10$
	x / x: x^2, blank / blank, 10
(5, 0) and (2, 0) are the x-intercepts of the parabola $y=x^2-7x+10$. What is the vertex?	3 / $3x^2$, $-9x$, -12
Factor completely: $3x^2-9x-12$	
	$x=\frac{9\pm\sqrt{(-9)^2-4(3)(-12)}}{2(3)}$

Thinking ahead and analyzing problems

WHAT'S THE FIRST STEP?

Match each problem to the first step you would take to solve it:

PROBLEM	FIRST STEP
A) Factor: $x^2-7x+10$	$0=(x-5)(x-2)$ = C
	$y=x^2-7x+10$ = B
B) Find the x-intercepts of $y=x^2-7x+10$	$x^2-7x=-10$ $+10\ \ +10$ = D
C) What are the roots of $y=(x-5)(x-2)$?	$\frac{5+2}{2}=3.5$
	$0=x^2-7x+10$ = E
D) Solve for x: $x^2-7x=-10$	x / x | x^2 | | | 10 = A
E) (5, 0) and (2, 0) are the x-intercepts of the parabola $y=x^2-7x+10$. What is the vertex?	
	3 | $3x^2$ | $-9x$ | -12 = F
F) Factor completely: $3x^2-9x-12$	-1 0 1 2 3 4 5 6 7 8 9 10 11 =
	$x=\frac{9\pm\sqrt{(-9)^2-4(3)(-12)}}{2(3)}$