

Learning Goal:

The goal for today is to activate prior mathematics knowledge in the following areas:

- algebra skills
- solving more challenging equations
- linear relations
- basic quadratics relations

Sep 5-1:52 PM

Simplify and Collect Like Terms

$$5a + 8b - 6a + 12b - 8c$$

$$4x^2 + 7x - 6x^2 + 12x$$

$$12yx^2 + 7x^2y - 8yx^2 + 5xy^2$$

Sep 6-1:40 PM

Distributive Property

Expand:

$$2(x + 5)$$

$$-4x(x - 3)$$

$$-2x^2(x^3 - 3x^2 + x)$$

Sep 6-1:35 PM

Distributive Property (FOIL)

Expand:

$$(x + 1)(x + 5)$$

$$(2x - 1)(x - 3)$$

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

Sep 6-2:32 PM

Expand and Simplify the following:

$$2(a+8) - 4a + 10$$

$$3(x - 5) - 7(x + 2) - (-3x + 1)$$

Sep 6-1:58 PM

Common Factoring (opposite of distributive property)

Factor the following:

$$8x + 24$$

$$12x^3 + 18x^2$$

Sep 6-1:42 PM

Solving Equations

To solve equations we must use the opposite operation approach to isolate the desired variable. We also need to have all of the variables collected on one side of the equation.

Isolating a variable means to make the coefficient (number in front of the letter) equal to "1" AND to have the variable (letter) in the "top" or numerator position.

Solve

$$2(a - 5) = 24$$

Sep 5-2:48 PM

Solve

$$6x + 12 = 2(x - 4)$$

$$-3(2x - 1) + 4(x - 2) = -19$$

Sep 6-1:45 PM

Solve

$$\frac{a}{2} + \frac{3}{4} = \frac{5}{8}$$

$$\frac{a}{4} + \frac{5}{8} = \frac{a}{2}$$

Sep 6-2:05 PM

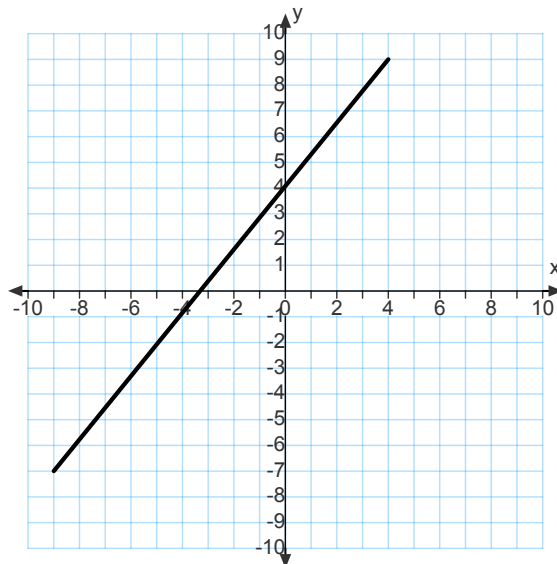
Linear Relations

X	Y
-1	-3
0	-1
1	1
2	
3	
4	

1. complete the table of values
2. determine the first differences
3. graph the points
4. determine the Slope and Y intercept
5. determine the equation of the relationship

Sep 6-2:06 PM

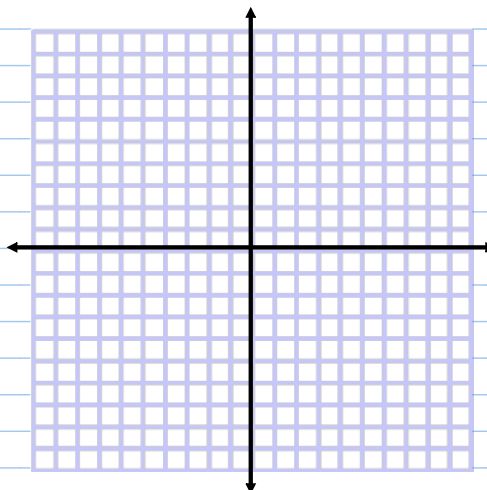
Determine the equation of the given line.



Sep 6-2:14 PM

Determine the equation of the line that passes through A(2,1) and B(-2, -8).

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

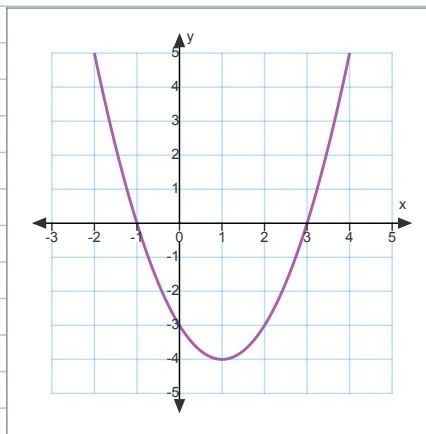


Sep 6-2:16 PM

State the location of the following:

- x intercepts
- y intercepts
- axis of symmetry
- vertex

$$y = (x + 1)(x - 3)$$



Sep 6-2:20 PM

Attachments

MCF3M-task2-review.doc