7th Grade
Oct 12, 2020

Please get out your binder for notes on graphing.

Today we will:
-take notes on graphing in the 4 quadrants
-do some examples together
-work on WS

HOMEWORK:

2-6 Skills and HW Practice WS

Budget project due Wed, Oct 14

ALEKS-60 minutes due by 11:59pm TONIGHT

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How do I add integers with the same sign?

Add their absolute values.
The sum is positive if both integers are positive.
The sum is negative if both integers are negative.
Examples: 3+4=7 -2+(-4)= -6

How do I add integers with different signs?

Subtract their absolute values.
The sum is positive if the positive integer's absolute value is greater.
The sum is negative if the negative integer's absolute value is greater.
Examples: 7+(-11) = -4 -2+9=7

How do I subtract integers with the same sign?

Add its opposite. Then follow the rules for adding.
Another way to say it is "same, change, change."

Example: 4-15= 4+ (-15) = -11

How do I subtract integers with different signs?

Add its opposite. Then follow the rules for adding.

Two negatives next to each other make a positive!

18- (-2) = 18 + (+2) = 20

-5 - 11 = -5 - (+11) = -5 + (-11) = -16

How do I multiply integers with the same sign?

The product of two integers with the same sign is positive.

7(8)=56 -9(-8)=72

Multiply by an even # of negatives ⟶ positive answer.

How do I multiply integers with different signs?

The product of two integers with different signs is negative.

7(-8)= -56 -9(8)= -72

Multiply by an odd # of negatives ⟶ negative answer.

How do I divide integers with the same sign?

The quotient of two integers with the same sign is positive.

$$144 \div 12 = 12$$

$$-72 \div -9 = 8$$

How do I divide integers with different signs?

The quotient of two integers with different signs is negative.

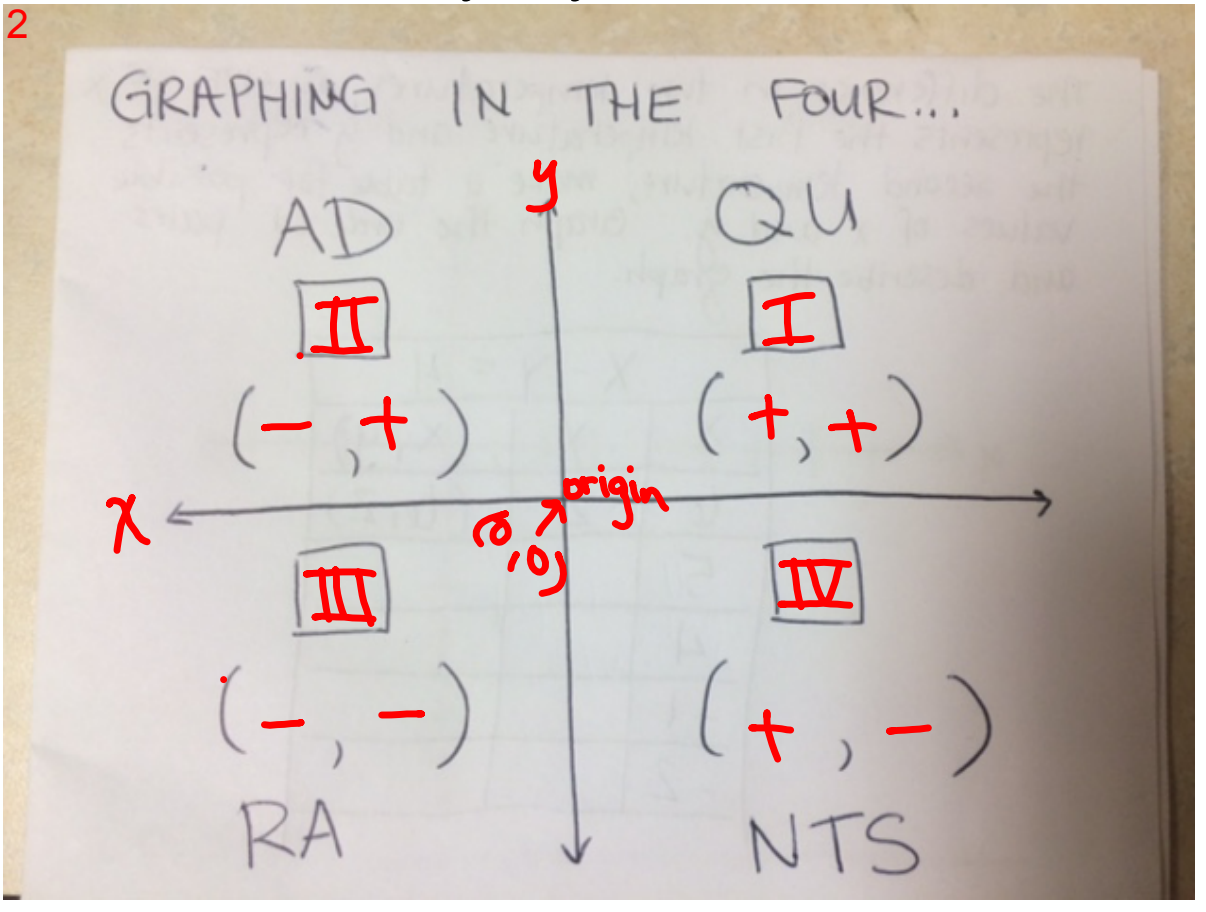
$$90 \div (-10) = -9$$

$$-120 \div 5 = -24$$

2-6

Oct 12

Write this directly in your notebook.



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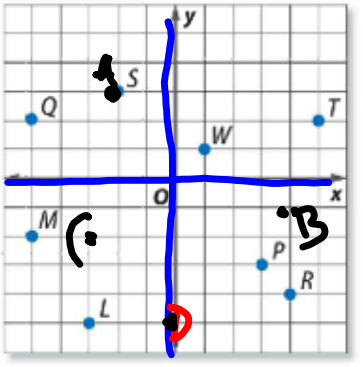
Guided Practice

Name the ordered pair for each point graphed at the right. (Example 1)

1. Q $(-5, +2)$
2. P $(3, -3)$ II
3. T $(5, 2)$
4. M $(-5, -2)$



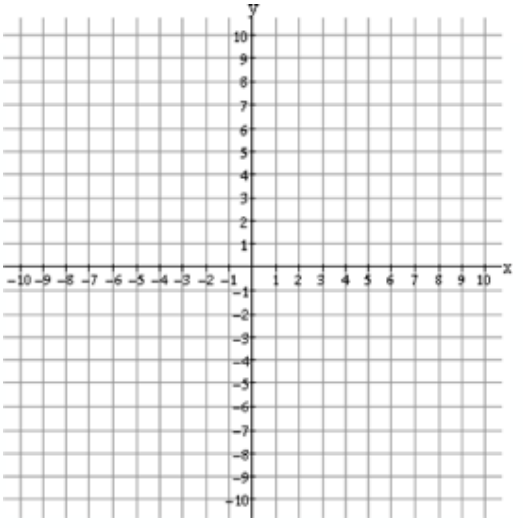
Graph and label each point on a coordinate plane. Name the quadrant in which each point is located. (Example 2)

5. $A(-2, 3)$ II
6. $B(4, -1)$ IV
7. $C(-3, -2)$ III
8. $D(0, -5)$ None II

9. **Model with Mathematics** The difference of two temperatures is 4°F. If x represents the first temperature and y represents the second temperature, make a table of possible values for x and y. Graph the ordered pairs and describe the graph. (Example 3)

x	y
8	4
16	12
24	20
28	24

Input	Output



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7th Grade ICA

Work on Lesson 6 worksheet. If we have time, we will check near end of class.

If done early, work in ALEKS or budget project.

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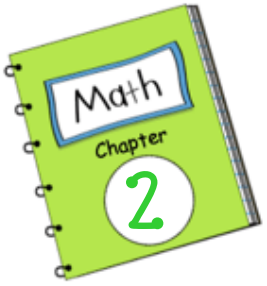


TITLE: Integers

Date	Lesson	Topic/Assignment
9/28	1	Integers and Abs Value. Video Notes
9/29	1	HW Practice WS
9/29	1	Abs Value Examples
9/29	ALL	Operations with Integers Foldable
9/30	2	Add Integers Video Notes
10/1	2	Skills Practice WS
10/2	3	Subtract Integers Video Notes
10/2	3	Practice WS
10/6	3	Skills Practice WS
10/6	2&3	"Math Antics" Video Notes
10/7	4&5	Multiply and Divide Integers Video Notes
10/8	4&5	Skills Practice WS
10/8	4&5	Partner Activity
10/12	6	Graphing in the 4 Quadrants Notes and Examples
10/12	6	Skills and HW Practice WS
10/13	ALL	Chapter 2 Study Guide

October 12, 2020

Name _____

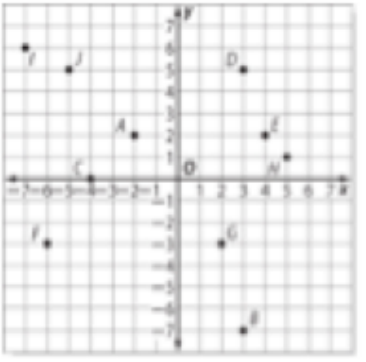
PRACTICE

Unit ___ Lesson ___ Due Date _____

Lesson 6 Skills Practice

Graphing in Four Quadrants

Name the ordered pair for each point graphed at the right.



1. *A*

2. *B*

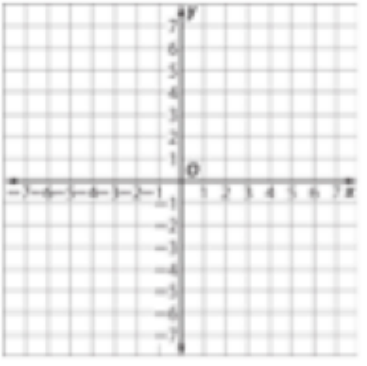
3. *C*

4. *D*

5. *E*

6. *F*

Graph and label each point on the coordinate plane. Name the quadrant in which each point is located.



11. *K* (1, 0)

12. *L* (0, 2)

13. *M* (–2, 4)

14. *N* (–5, –4)

15. *P* (6, –2)

16. *Q* (7, –6)

21. Make a table of values and graph six sets of ordered pairs for the equation $y = x - 4$. Describe the graph.

Describe the graph:

_____

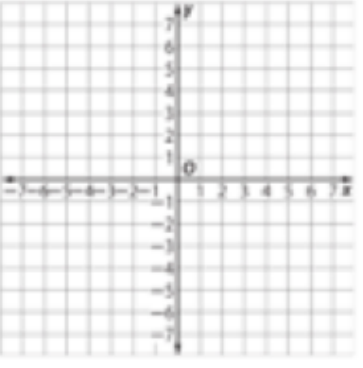
_____

_____

_____

_____

$y = x - 4$		
x	y	(x, y)



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Lesson 6 Homework Practice

Graphing in Four Quadrants

Graph and label each point on the coordinate plane. Name the quadrant in which each point is located.

1. A (8, 6)

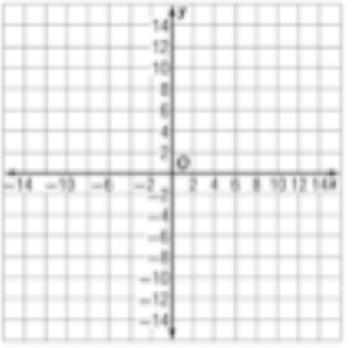
2. B (–8, 6)

3. C (–4, –11)

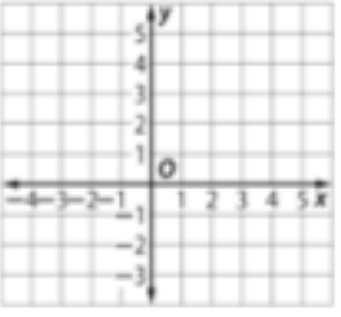
4. D (3, –6)

5. E (9, 0)

6. F (–4, 1)



7. On the coordinate plane, draw a rectangle $ABCD$ with vertices at $A(1, 4)$, $B(5, 4)$, $C(5, 1)$, and $D(1, 1)$. Then graph and describe the new rectangle formed when you subtract 3 from each coordinate of the vertices in rectangle $ABCD$.



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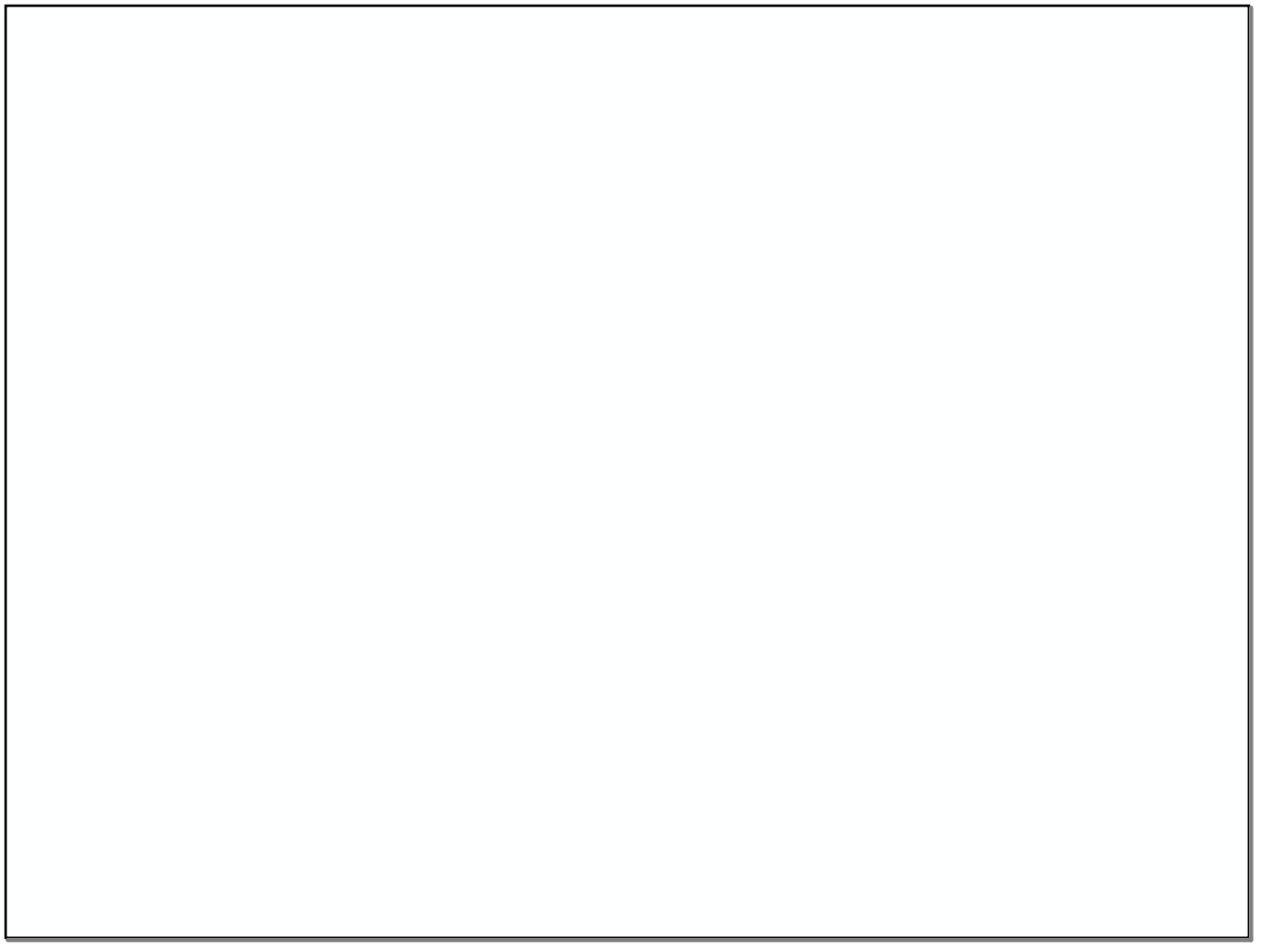
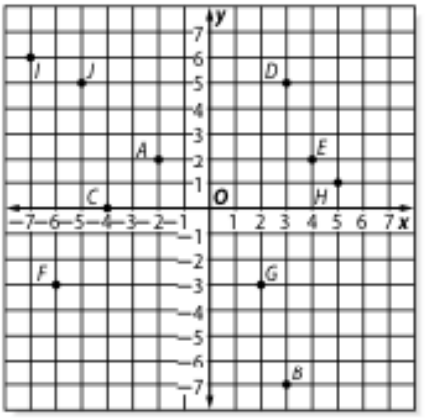


Lesson 6 Skills Practice

Graphing in Four Quadrants

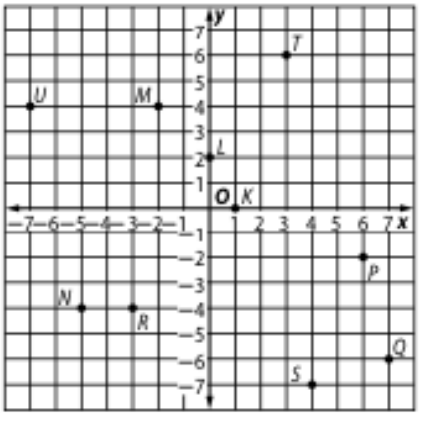
Name the ordered pair for each point graphed at the right.

1. A **(−2, 2)**
2. B **(3, −7)**
3. C **(−4, 0)**
4. D **(3, 5)**
5. E **(4, 2)**
6. F **(−6, −3)**
7. [illegible] **(−2, −3)**
8. [illegible] **(5, 1)**
9. [illegible] **(−7, 6)**
10. [illegible] **(−5, 5)**



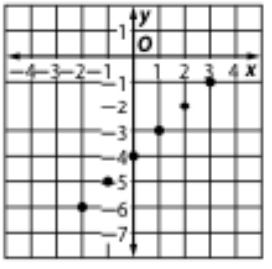
Graph and label each point on the coordinate plane. Name the quadrant in which each point is located.

11. K (1, 0) **none**
12. L (0, 2) **none**
13. M (−2, 4) **II**
14. N (−5, −4) **III**
15. P (6, −2) **IV**
16. Q (7, −6) **IV**
17. [illegible] **II**
18. [illegible] **IV**
19. T (3, 6) **I**
20. [illegible] **II**



21. Make a table of values and graph six sets of ordered pairs for the equation $y = x - 4$. Describe the graph.

$y = x - 4$		
x	y	(x, y)
3	−1	(3, −1)
2	−2	(2, −2)
1	−3	(1, −3)
0	−4	(0, −4)
−1	−5	(−1, −5)
−2	−6	(−2, −6)

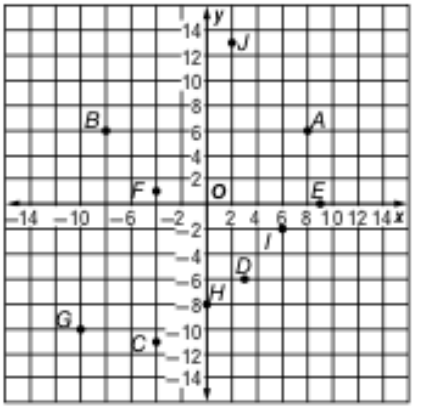


The points are along a line slanting up to the right, crossing the *y*-axis at −4 and the *x*-axis at 4.

Lesson 6 Homework Practice

Graphing in Four Quadrants

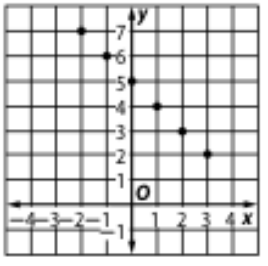
Graph and label each point on the coordinate plane. Name the quadrant in which each point is located.



1. $A\ (8, 6)$ **I**
2. $B\ (-8, 6)$ **II**
3. $C\ (-4, -11)$ **III**
4. $D\ (3, -6)$ **IV**
5. $E\ (9, 0)$ **none**
6. $F\ (-4, 1)$ **II**
7. $G\ (-10, -10)$ **III**
8. $H\ (0, -8)$ **none**
9. $I\ (6, -2)$ **IV**
10. $J\ (2, 13)$ **I**

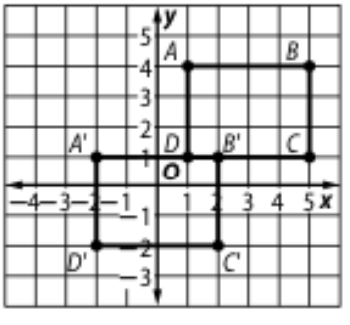
11. Make a table of values and graph six sets of ordered pairs for the equation $y = 5 - x$. Describe the graph.

$y = 5 - x$		
x	y	(x, y)
3	2	(3, 2)
2	3	(2, 3)
1	4	(1, 4)
0	5	(0, 5)
−1	6	(−1, 6)
−2	7	(−2, 7)



The points are along a line slanting down to the right, crossing the *y*-axis at 5 and the *x*-axis at 5.

12. On the coordinate plane, draw a rectangle $ABCD$ with vertices at $A(1, 4)$, $B(5, 4)$, $C(5, 1)$, and $D(1, 1)$. Then graph and describe the new rectangle formed when you subtract 3 from each coordinate of the vertices in rectangle $ABCD$.



The new rectangle is the same size as rectangle *ABCD* and is shifted to the left 3 units and down 3 units, with vertices at (−2, 1), (2, 1), (2, −2), and (−2, −2).