



Warm up Grade 7

Date: Sept 16



a) List the following integers from least to greatest

-7, +8, 0, +5, -9, -1, +2

-9 -7 -1 0 +2 +5 +8

b) Place < , > or = into the _____

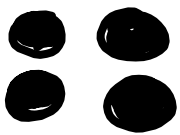
i) < -3 +2

> ii) 0 -5

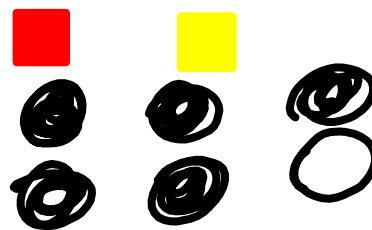
>

iii) -4 = -7 iv) 3

c) Use tiles to represent +4



1st
way



2nd way

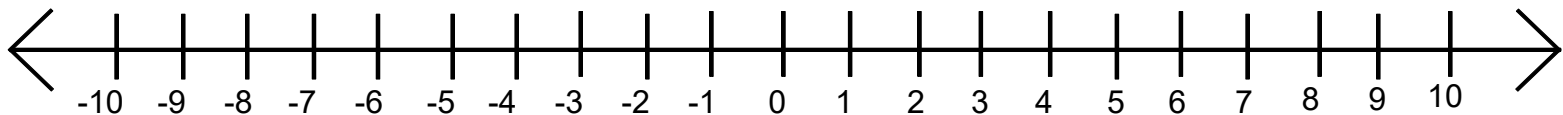
7. Copy and complete by placing $<$, $>$, or $=$ between the integers.
Then, use a number line to verify your answer.

- a) $+5$ $+10$
- b) -5 -10
- c) $+5$ 5
- d) -6
- e) -5
- f) 10 -11
- g) -8
- h) -8

$<$

$>$

$=$



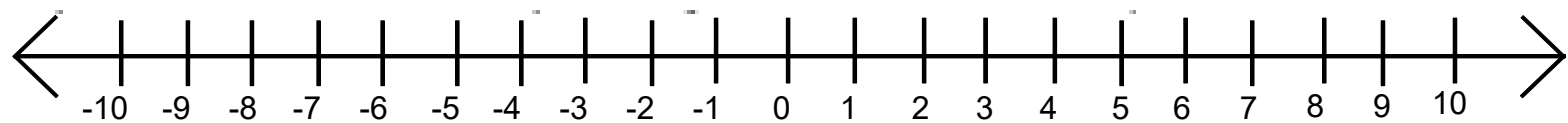
9. Order the integers in each set from least to greatest.

a) $+5, -5, +4, +2, -2$

b) $-8, -12, +10, 0, -10$

c) $+41, -39, -41, -15, -25$

d) $+1, -1, +2, -2, +3$



a) $-5, -2, +2, +4, +5$

c) $-41, -39, -25, -15, +41$

10. Order the integers in each set from greatest to least.

a) $-7, +8, -9, +10, -11$

b) $-18, 16, -11, -4, +6$

c) $0, +1, +2, -1, -2$

d) $+14, -25, -30, +3, -10$

10a) $+10, +8, -7, -9, -11$

10c) $+2, +1, 0, -1, -2$

11. On January 16, 2008, these temperatures were recorded in Canada.

Place	Temperature	Place	Temperature
Lethbridge, AB	-16°C	Iqaluit, NU	-29°C
La Ronge, SK	-27°C	Dawson City, YT	-26°C
Hay River, NWT	-29°C	Prince George, BC	-6°C
Campbell River, BC	0°C	Ste. Rose du Lac, MB	-17°C

Which place was the warmest? The coldest? How did you find out?

↓
Campbell
River
BC

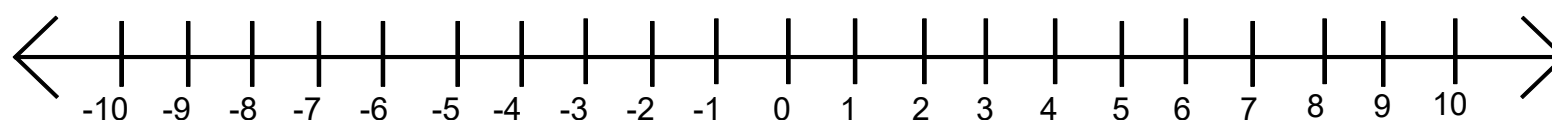
↓ Hay River
Iqaluit

12. a) Which of these integers are greater than -6 ? How do you know?

-3 , $+2$, -7 , -5

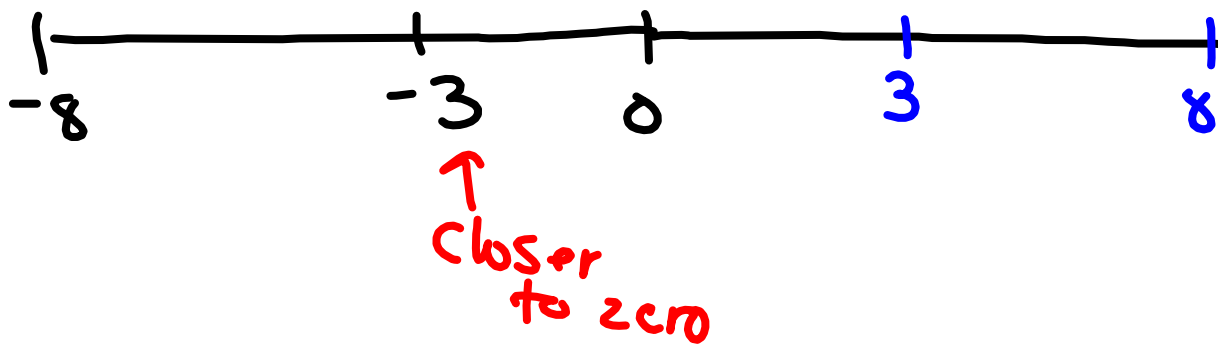
b) Which of these integers are less than -3 ? How do you know?

$+2$, -11 , $+3$, -2 , -4



13. You know that 8 is greater than 3. Explain why -8 is less than -3 .

-8 is 8 units to the left of 0 while -3 is only 3 units away from zero



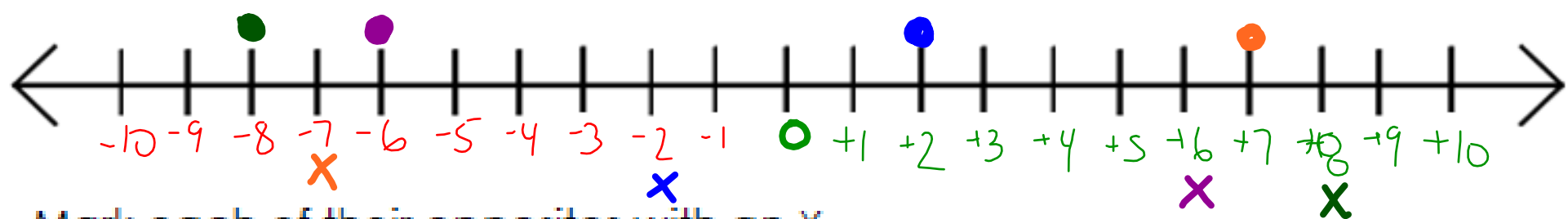
Name: _____

Math 7 Integer Review

Solutions

1) Draw a number line from -10 to +10. Mark these integers with dark dots on your number line:

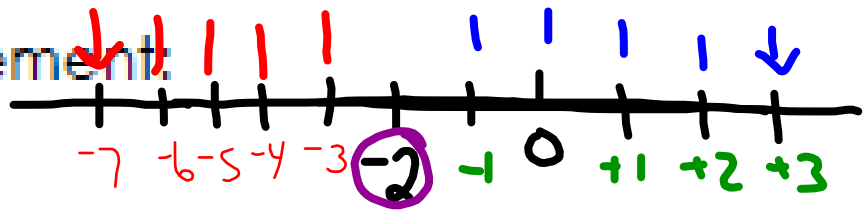
+2, -6, -8, +7.



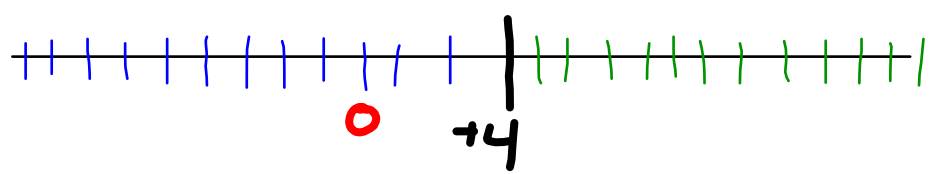
Mark each of their opposites with an X.

2) Name two integers to meet each requirement:

a) 5 units from -2 on a number line

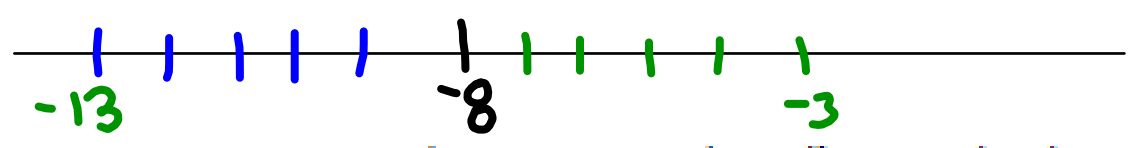


b) 12 units from +4 on a number line



c) 5 units from -8 on a number line

-13, -3

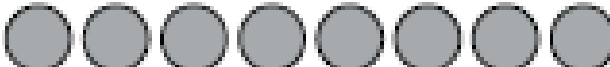


3) Two opposite integers are 16 apart on a number line. What could they be?

+ 8 , - 8

4) What integers are represented? (Remember that positive is shaded.)

a)  -3

b)  $+8$

c) Draw the opposites of each of the integers in parts a) and b) and tell what the new integers are.

a) $+3$ 

b) -8 

5) Replace the $\square$ with a greater than ($>$) or less than ($<$) sign to make these expressions true.

a) $-2 \square +2$

b) $+8 \square -12$

c) $-12 \square -8$

6) Put these integers in order from least to greatest:

$-2, +8, +2, -6, -10, -1$

$-10, -6, -2, -1, +2, +8$

7) List two integers to fit each description.

a) between -4 and 3 $-3, -2, -1, 0, 1, 2$

b) between -4 and -10 $-5, -6, -7, -8, -9$

c) between -12 and $+1$ $-11, -10, -9, -8, -7, -6, -5, -4, -3, -2, -1$

d) a little greater than -4 -3

e) a little less than -9 -10

8) Write the correct integer for the scenario.

a) Karen gave 6 candies away

-6 _____

b) Ted walked up 4 stairs

$+4$

c) The temperature dropped 6 degrees

-6°C

Notes

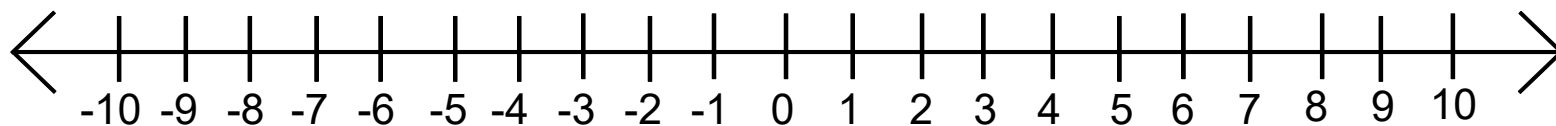
Recall

(-)

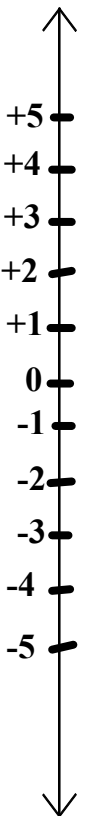
(+)

Integers are **negative** and **positive** whole numbers. They can be written on horizontal or vertical number lines.

Horizontal



Vertical



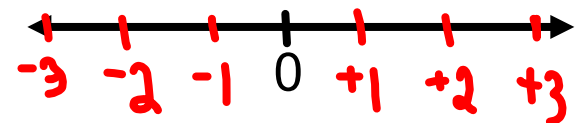
Opposite integers have the **same number but different signs**. Example) $+5$, -5

You must use the $+$ or $-$ signs to represent integers

Always compared to zero

Ex) $+1$ is 1 units GREATER than ZERO

Ex) -2 is 2 units LESS than ZERO



Activating Prior Knowledge

What Is an Integer?

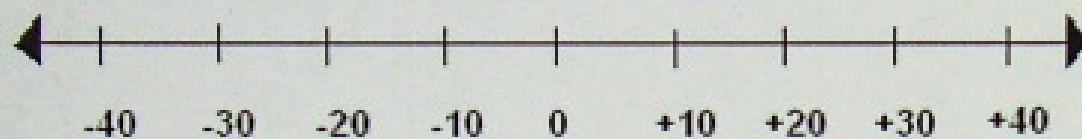
Quick Review

Integers are numbers such as +3, -5, +10, -1, and 0.

We put + in front of a number to indicate it is a *positive integer*.

We put - in front of a number to indicate it is a *negative integer*.

We can show integers on a number line.



The negative integer, -10,
is 10 units less than 0.

The positive integer, +30,
is 30 units greater than 0.

Example 1

Use a positive or negative integer to represent each situation.

a) diving 25 m below the ocean's surface

b) a temperature of 15°C

Solution

a)

(-25 m)

b)

$(+15^{\circ}\text{C})$

More Practice:

Give the integer for each of the following:

(a) a gain of 12 = $+12$ $(+12)$

(b) a decrease of 35 = -35 (-35)

(c) 250 m above sea level = $+250$ $(+250\text{m})$

(d) to lose \$9 = -9

(e) to owe \$ 25 = -25 (-25)



> is the **greater** than sign

< is the **less** than sign

Remember

Big mouth points
towards the BIG #



Small mouth points
towards the small #

Put a < or > in the circle

a) 6  9 *Bigger*

b) 15  -2 *Bigger*

c) -5  -2 *Bigger*

Comparing and Ordering Integers

Quick Review



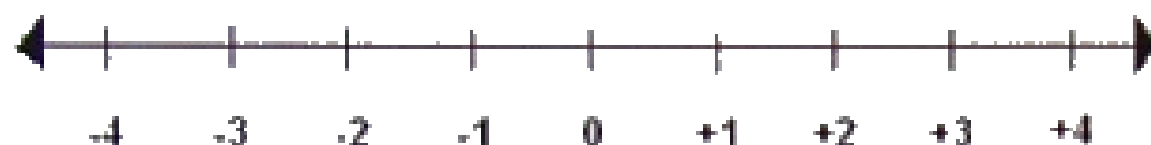
Positive integers, such as +5, +9, +1, are greater than 0.

Negative integers, such as -5, -9, -1, are less than 0.

Any positive integer is greater than any negative integer.

For example, +1 is greater than -1000.

We can use a number line to help us compare and order integers.



We use the symbols $>$ and $<$ to show order.

-3 is to the left of +1; so, -3 is less than +1, and we write: $-3 < +1$

+3 is to the right of -4; so, +3 is greater than -4, and we write: $+3 > -4$

Example 2

Order these integers from least to greatest: +5, -6, +3, -8, 0, -1, +8

Short Quiz in 2 days time

Class Worksheet

ANOTHER WS on Slide 11 if needed

Check

1. Mark each integer on a number line.

a) +2

b) -6

c) -3

d) +8

2. Use a positive or negative integer to represent each situation.

a) The water level rises 4 cm after a low tide.

b) The average temperature close to the South Pole is 50°C below 0°C .

c) You earned \$19 since yesterday.

d) The time is 11 s before blast-off.

e) You walk down 7 stairs.

f) You ride up 6 floors on an elevator.

g) The golfer took 3 strokes fewer than par.

3. Use question 2 as a model.

Use each integer below to describe a situation.

a) +5

b) -4

c) +110

d) -150

Activating Prior Knowledge: Unit 2

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Check

4. Order the integers in each set from least to greatest.

a) $+5, -3, +4$

b) $0, +6, -6$

c) $+6, -6, +5, +3, -3$

d) $-8, +9, -10, +11, -12$

e) $0, +2, -3, +4, -6$

f) $-30, +25, -12, -5, +7$

5. Copy each statement. Use $<$ or $>$ to show which number in each pair is greater. Use a number line if it helps.

a) $+2 \square +8$

b) $0 \square -5$

c) $-7 \square 0$

d) $+250 \square -251$

e) $-100 \square -70$

f) $-361 \square -360$

Homework Solutions

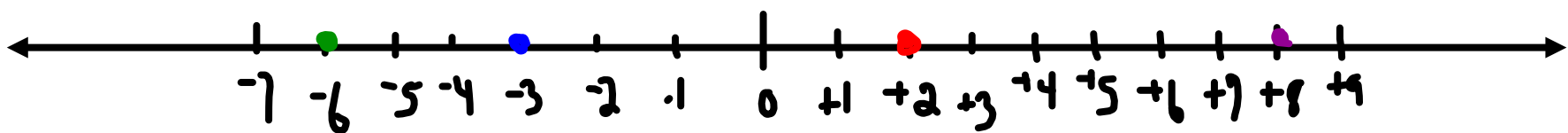
1. Mark each integer on a number line.

a) +2

b) -6

c) -3

d) +8



2. Use a positive or negative integer to represent each situation.

a) The water level rises 4 cm after a low tide.

b) The average temperature close to the South Pole is 50°C below 0°C .

c) You earned \$19 since yesterday.

d) The time is 11 s before blast-off.

e) You walk down 7 stairs.

f) You ride up 6 floors on an elevator.

g) The golfer took 3 strokes fewer than par.

2a) +4

b) -50

c) +19

d) -11

e) -7

f) +6

g) -3

4. Order the integers in each set from least to greatest.

a) +5, -3, +4

b) 0, +6, -6

c) +6, -6, +5, +3, -3

d) -8, +9, -10, +11, -12

e) 0, +2, -3, +4, -6

f) -30, +25, -12, -5, +7

5. Copy each statement. Use $<$ or $>$ to show which number in each pair is greater. Use a number line if it helps.

a) $+2 \square +8$

b) $0 \square -5$

c) $-7 \square 0$

d) $+250 \square -251$

e) $-100 \square -70$

f) $-361 \square -360$

Worksheet



Board Work



Brain Teasers 1

Flora sat in front of Vern.

Jeremy sat between Ming and Vern.

Steve sat to the left of Tom and Flora.

Who sat where? Complete the diagram.

Front

Back
