A Use numbers from the box to label points on the number line.
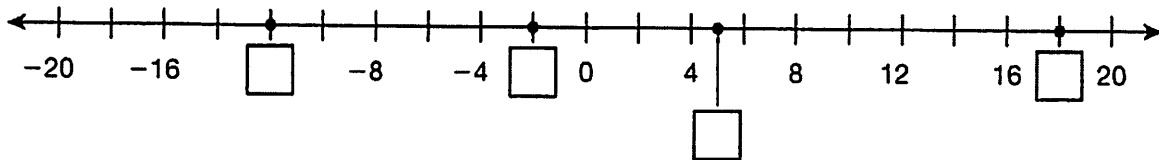

| 2 |
| -2 |
| 5 |
| -5 |
| 12 |
| -12 |
| 18 |
| -18 |

A Select True or False for each statement.

A. Zero is a positive number.   ○ True   ○ False

B. 8 and 4 are opposite integers.   ○ True   ○ False

C. 58 and 1,248 are positive integers.   ○ True   ○ False

D. Opposite integers are the same distance from zero.   ○ True   ○ False

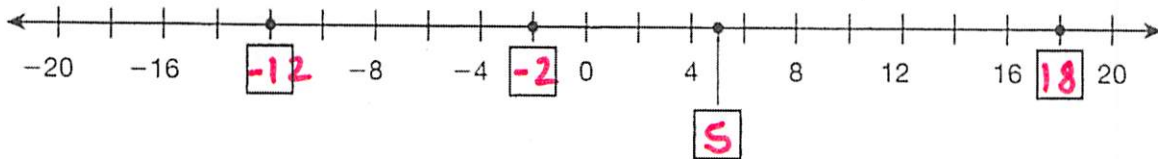E. −38 is the opposite of 38.   ○ True   ○ False

A Use the numbers from the box to write the integer that describes each situation.

A. the temperature rises 20°   _____

B. a debit of $20 to your bank account   _____

C. an item is discounted by $20   _____

D. a price increases by $20   _____

E. 20 feet below sea level   _____

F. a deposit of $20 in a bank account   _____

| 20 |
| -20 |

Rational Numbers Extra Practice   Name _____ Key _____

A Use numbers from the box to label points on the number line.

| 2 |
| -2 |
| 5 |
| -5 |
| 12 |
| -12 |
| 18 |
| -18 |

A Select True or False for each statement.

A. Zero is a positive number.   ○ True ● False

B. 8 and 4 are opposite integers.   ○ True ● False

C. 58 and 1,248 are positive integers.   ● True ○ False

D. Opposite integers are the same distance from zero.   ● True ○ False

E. −38 is the opposite of 38.   ● True ○ False

A Use the numbers from the box to write the integer that describes each situation.

A. the temperature rises 20°   __20__

B. a debit of $20 to your bank account   __-20__

C. an item is discounted by $20   __-20__

D. a price increases by $20   __20__

E. 20 feet below sea level   __-20__

F. a deposit of $20 in a bank account   __20__

| 20 |
| -20 |

B Keith is standing on a hill overlooking the ocean. The altitude is 50 feet above sea level. Jill dove to a depth of 40 feet below sea level.

Part A

Write Keith's and Jill's altitudes using integers.
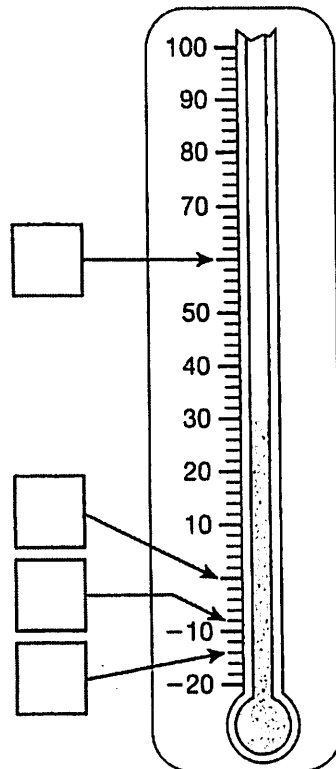
Keith's altitude: _____

Jill's altitude: _____

Part B

Who is at an altitude farther from sea level? Explain how you know.

B ## Part A

Write the missing temperatures on the thermometer.

B Keith is standing on a hill overlooking the ocean. The altitude is 50 feet above sea level. Jill dove to a depth of 40 feet below sea level.

Part A

Write Keith's and Jill's altitudes using integers.

Keith's altitude: **50**

Jill's altitude: **-40**

Part B

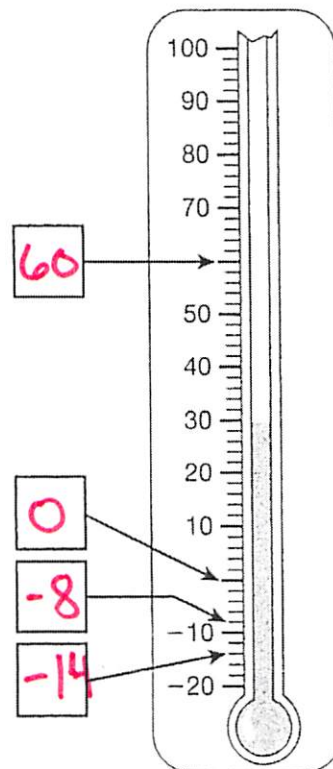Who is at an altitude farther from sea level? Explain how you know.

Keith is 50 ft from sea level and Jill is 40 feet from sea level.

Keith is further away.

B **Part A**
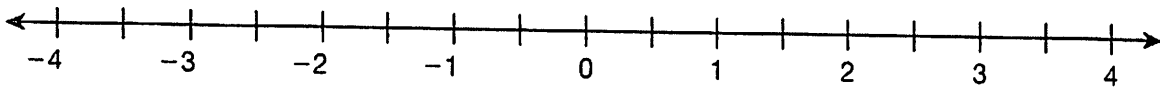
Write the missing temperatures on the thermometer.

Each little notch is 2!

60

0

-8

-14

C Write the integer described by each expression.

A. the opposite of 4×2 _____

B. the negative integer closest to 0 on the number line _____

C. the integer immediately to the left of -16 on the number line _____

D. the opposite of -12 _____

E. the integer halfway between -20 and -16 _____

C Locate 3.8 and $-3\frac{1}{4}$ on the number line.

The number 3.8 is between _____ and _____. It is closest to _____.

The number $-3\frac{1}{4}$ is between _____ and _____. It is closest to _____.

C Which numbers lie between -5 and -6 on a number line?

A. $-4\frac{7}{8}$

B. $-\frac{26}{5}$

C. -6.2

D. 5.25

C Which of these rational numbers is closest to zero on a number line? Explain how you determined your answer.

$$2\frac{2}{5}, \ -1\frac{9}{10}, \ \frac{3}{2}, \ -2\frac{4}{5}$$

C Write the integer described by each expression.

A. the opposite of 4 × 2 = **8**   _−8_

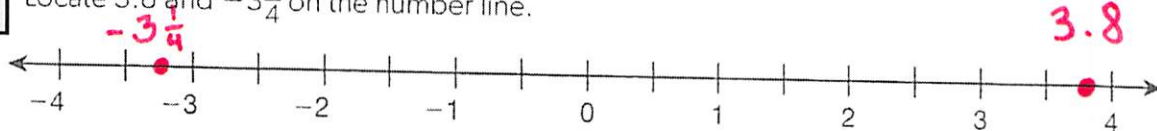B. the negative integer closest to 0 on the number line   _−1_

C. the integer immediately to the left of −16 on the number line   _−17_

D. the opposite of −12   _12_

E. the integer halfway between −20 and −16   _−18_

C Locate 3.8 and $-3\frac{1}{4}$ on the number line.

$-3\frac{1}{4}$ 3.8

The number 3.8 is between __3__ and __4__. It is closest to __4__.

The number $-3\frac{1}{4}$ is between __−3__ and __−4__. It is closest to __−3__.

C Which numbers lie between −5 and −6 on a number line?

~~A.~~ $-4\frac{7}{8}$

(B.) $-\frac{26}{5}$ $= -5\frac{1}{5}$

C. −6.2

D. 5.25

C Which of these rational numbers is closest to zero on a number line? Explain how you determined your answer.

$2\frac{2}{5}, -1\frac{9}{10}, \frac{3}{2}, -2\frac{4}{5}$

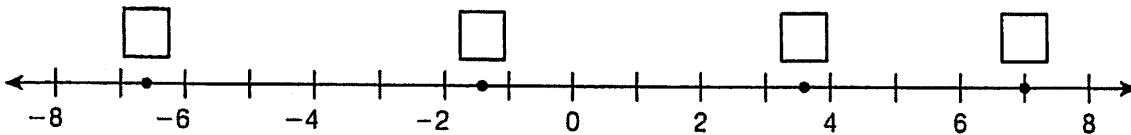$-2\frac{4}{5}$ $-1\frac{9}{10}$ 0 $1\frac{1}{2}$ $2\frac{3}{5}$

−1.9   1.5

1.5 is closer to 0 than −1.9 so

$\frac{3}{2}$ is closest to 0 on the NL.

D Match each positive rational number with its opposite.

A. $\frac{15}{8}$ -5.8

B. 5.8 $-1\frac{7}{8}$

C. $1\frac{5}{8}$ -5.08

D. 5.08 $-\frac{13}{8}$

D Use the numbers in the box to label the points on the number line.

Box: $-6\frac{2}{3}$ $\frac{29}{8}$ 7 -1.3

D Select True or False for each statement.

A. The decimal -4.25 is closer to -5 than to -4 on a number line.   ○ True ○ False

B. The number $\frac{17}{5}$ is between 3 and 4 on a number line.   ○ True ○ False

C. The number 8 is the same distance from 0 as -8 is on a number line.   ○ True ○ False

D. Numbers with opposite signs can be on the same side of zero on a number line.   ○ True ○ False

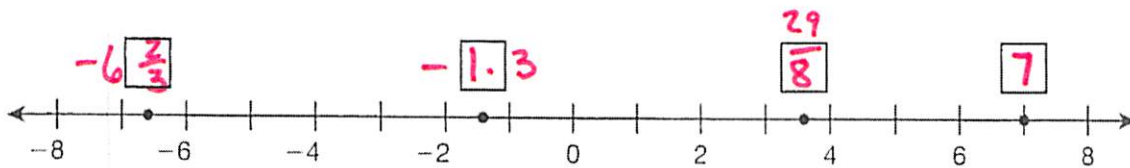**D** Match each positive rational number with its opposite.

A. $\frac{15}{8} = 1\frac{7}{8}$ -5.8

B. 5.8 $-1\frac{7}{8}$

C. $1\frac{5}{8} = \frac{13}{8}$ -5.08

D. 5.08 $-\frac{13}{8}$

D Use the numbers in the box to label the points on the number line.

$-6\frac{2}{3}$ -1.3 $\frac{29}{8}$ 7

Box:
$-6\frac{2}{3}$

$\frac{29}{8} = 3\frac{5}{8}$

7

-1.3

D Select True or False for each statement.

A. The decimal -4.25 is closer to -5 than to -4 on a number line.   ○ True   ● False

B. The number $\frac{17}{5} = 3\frac{2}{5}$ is between 3 and 4 on a number line.   ● True   ○ False

C. The number 8 is the same distance from 0 as -8 is on a number line.   ● True   ○ False

D. Numbers with opposite signs can be on the same side of zero on a number line.   ○ True   ● False

E Decide if each number is between −9 and −10 on a number line. Select Yes or No.

A. −8.95   ○ Yes ○ No

B. the opposite of $9\frac{7}{9}$ ○ Yes ○ No

C. $-\frac{19}{2}$ ○ Yes ○ No

D. the opposite of the opposite of 9.3   ○ Yes ○ No

E Josh located and labeled the points shown on the number line.
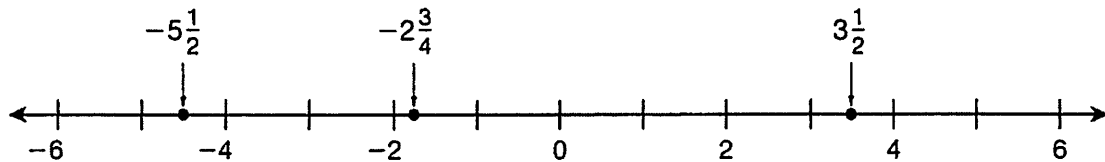
What error did Josh make? Describe how Josh can fix his mistake.

E Which numbers are between −7 and 2 on a number line? Circle all that apply.

A. 2.1

B. −1

C. 0

D. −7.5

E. 3.5

F. −6.4

G. −8

E Lakshmi has a box of $2\frac{1}{2}$-inch screws, a box of $1\frac{3}{4}$-inch screws, a box of $1\frac{5}{8}$-inch screws, and a box of $2\frac{1}{8}$-inch screws. She wants to put the boxes on a shelf so that the screws are ordered from shortest to longest.

What is the order of the screws from shortest to longest?

_____ , _____ , _____ , _____

E   Decide if each number is between −9 and −10 on a number line. Select Yes or No.

A.   −8.95   ○ Yes   ● No

B.   the opposite of $9\frac{7}{9}$ ● Yes   ○ No

C. $-\frac{19}{2} = -9\frac{1}{2}$ ● Yes   ○ No

D.   the opposite of the opposite of 9.3   ● Yes   ○ No

E   Josh located and labeled the points shown on the number line.
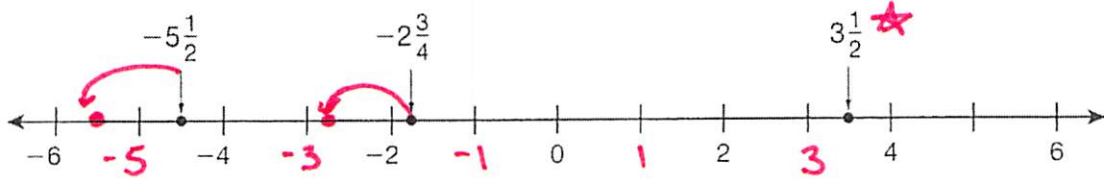
What error did Josh make? Describe how Josh can fix his mistake.

Josh misplaced the 2 negative numbers and did not locate them in between the correct integers

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E   Which numbers are between −7 and 2 on a number line? Circle all that apply.

A.   2.1

(B.)   −1

(C.)   0

D.   −7.5

E.   3.5

(F.)   −6.4

G.   −8

E   Lakshmi has a box of $2\frac{1}{2}$-inch screws, a box of $1\frac{3}{4}$-inch screws, a box of $1\frac{5}{8}$-inch screws, and a box of $2\frac{1}{8}$-inch screws. She wants to put the boxes on a shelf so that the screws are ordered from shortest to longest.

      2.5   1.75   1.625
    2.125

What is the order of the screws from shortest to longest?

$1\frac{5}{8}$, $1\frac{3}{4}$, $2\frac{1}{8}$, $2\frac{1}{2}$

F Does the statement correctly describe the order of −1.7, 2.2, and 0.9? Select Yes or No.

A. −1.7 is to the left of 2.2 on a number line   ○ Yes ○ No

B. $0.9 < -1.7 < 2.2$ ○ Yes ○ No

C. −1.7 is greater than 0.9   ○ Yes ○ No

D. $2.2 > 0.9 > -1.7$ ○ Yes ○ No

F The table below shows the temperatures in four cities.

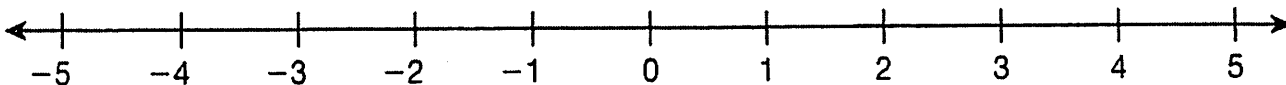| City	Yorkville	Kent	Amherst	Union City
Temperature (in °F)	−12.4	6.1	−6.1	3

Select True or False for each statement.

A. It is warmer in Kent than in Yorkville.   ○ True ○ False

B. It is coldest in Union City.   ○ True ○ False

C. The temperature in Yorkville is the least.   ○ True ○ False

D. The temperature in Kent is less than the temperature in Amherst.   ○ True ○ False

F Graph and label the following numbers on the number line.

○ $-2\frac{1}{2}$ and $|2\frac{1}{2}|$

○ -3.8 and $|-3.8|$

F Does the statement correctly describe the order of -1.7, 2.2, and 0.9? Select Yes or No.

A. -1.7 is to the left of 2.2 on a number line   ● Yes   ○ No

B. $0.9 < -1.7 < 2.2$ ○ Yes   ● No

C. -1.7 is greater than 0.9 ○ Yes   ● No

D. $2.2 > 0.9 > -1.7$ ● Yes   ○ No

F The table below shows the temperatures in four cities.

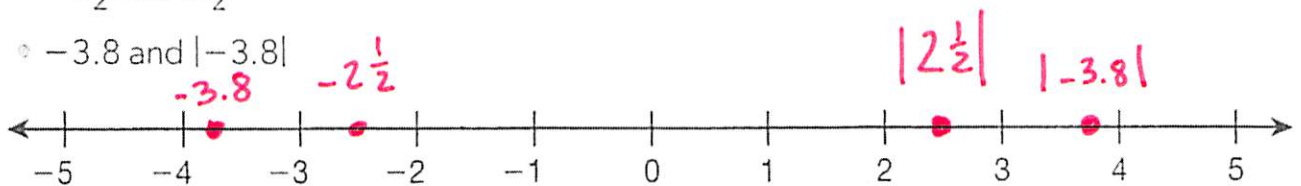| City	Yorkville	Kent	Amherst	Union City
Temperature (in °F)	$-12.4°$	$6.1°$	$-6.1°$	$3°$

Select True or False for each statement.

A. It is warmer in Kent than in Yorkville.   ● True   ○ False

B. It is coldest in Union City.   ○ True   ● False

C. The temperature in Yorkville is the least.   ● True   ○ False

D. The temperature in Kent is less than the temperature in Amherst.   ○ True   ● False

---

F Graph and label the following numbers on the number line.

○ $-2\frac{1}{2}$ and $|2\frac{1}{2}|$

○ -3.8 and $|-3.8|$

$|2\frac{1}{2}|$ $|-3.8|$

-3.8 $-2\frac{1}{2}$

‹—+———+———+———+———+———+———+———+———+———+———+—›
   -5 -4 -3 -2 -1 0 1 2 3 4 5

G Determine which of the following statements are true. Circle all that apply.

A. $-7 < 7$

B. $|-7| < |7|$

C. $|-7| > 7$

D. $-7 < |7|$

E. $-7 = |7|$

F. $|-7| = 7$

G. $|-7| = |7|$

G Look at each set of numbers. Are the numbers in order from least to greatest? Select Yes or No.

A. $|-9|, -4, 2$ ○ Yes   ○ No

B. $-11, |-8|, 15$ ○ Yes   ○ No

C. $|-3|, |-10|, |14|$ ○ Yes   ○ No

D. $|-1|, |-6|, |5|$ ○ Yes   ○ No

G The balance in Pedro's account is $-\$24.50$. The balance in John's account is $-\$33.75$. Select True or False for each statement.

A. The balance in Pedro's account is greater than   ○ True   ○ False
the balance in John's account.

B. Pedro's debt is greater than John's debt.   ○ True   ○ False

C. John owes more than Pedro.   ○ True   ○ False

G Determine which of the following statements are true. Circle all that apply.

(A.) $-7 < 7$

B. $|-7| < |7|$ (annotations: 7, 7)

C. $|-7| > 7$ (annotation: 7)

(D.) $-7 < |7|$ (annotation: 7)

E. $-7 = |7|$ (annotation: 7)

(F.) $|-7| = 7$ (annotation: 7)

(G.) $|-7| = |7|$ (annotation: 7)

G Look at each set of numbers. Are the numbers in order from least to greatest? Select Yes or No.

A. $|-9|, -4, 2$ (annotation: 9)   ○ Yes   ● No

B. $-11, |-8|, 15$ (annotation: 8)   ● Yes   ○ No

C. $|-3|, |-10|, |14|$ (annotations: 3, 10, 14)   ● Yes   ○ No

D. $|-1|, |-6|, |5|$ (annotations: 1, 6, 5)   ○ Yes   ● No

G The balance in Pedro's account is $-\$24.50$. The balance in John's account is $-\$33.75$. Select True or False for each statement.

A. The balance in Pedro's account is greater than the balance in John's account.   ● True   ○ False

B. Pedro's debt is greater than John's debt.   ○ True   ● False

C. John owes more than Pedro.   ● True   ○ False