

Lesson 7: Practice Problems

1. In the context of elevation, what would $|-7|$ feet mean?

$|$ absolute value means distance from zero

7 feet from sea level

2. Match the the statements written in English with the mathematical statements.

a. The number -4 is a distance of 4 units away from 0 on the number line.

1. $|-63| > 4$ ~~B~~ ~~B~~ ~~B~~ B

b. The number -63 is more than 4 units away from 0 on the number line.

2. $-63 < 4$ E

c. The number 4 is greater than the number -4.

3. $|-63| > |4|$ F

d. The numbers 4 and -4 are the same distance away from 0 on the number line.

4. $|-4| = 4$ A

e. The number -63 is less than the number 4.

5. $4 > -4$ C

f. The number -63 is further away from 0 than the number 4 on the number line.

6. $|4| = |-4|$ D

3. Compare each pair of expressions using $>$, $<$, or $=$.

a. -32 ___ 15

b. $|-32|$ ___ $|15|$

c. 5 ___ -5

d. $|5|$ ___ $|-5|$

e. 2 ___ -17

f. 2 ___ $|-17|$

g. $|-27|$ ___ $|-45|$

h. $|-27|$ ___ -45

4. Mai received and spent money in the following ways last month. For each example, write a signed number to represent the change in money from her perspective.

- Her grandmother gave her \$25 in a birthday card.
- She earned \$14 dollars babysitting.
- She spent \$10 on a ticket to the concert.
- She donated \$3 to a local charity
- She got \$2 interest on money that was in her savings account.

5. Here are the lowest temperatures recorded in the last 2 centuries for some US cities. Temperatures are in degrees Fahrenheit.

- Death Valley, CA was -45 in January of 1937.
- Danbury, CT was -37 in February of 1943.
- Monticello, FL was -2 in February of 1899.
- East Saint Louis, IL was -36 in January of 1999.
- Greenville, GA was -17 in January of 1940.

- Which of these states has the lowest record temperature?
- Which state has a lower record temperature, FL or GA?
- Which state has a lower record temperature, CT or IL?
- How many more degrees colder is the record temperature for GA than for FL?

6. Find the quotients.

a. $0.024 \div 0.015$

b. $0.24 \div 0.015$

c. $0.024 \div 0.15$

d. $24 \div 15$