

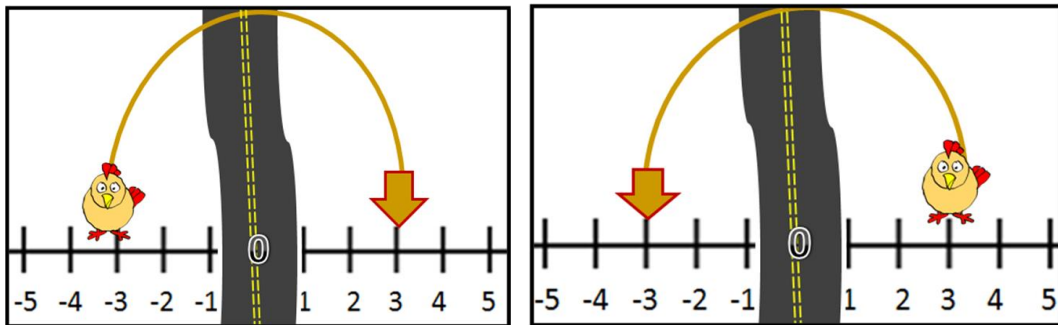
Understand absolute value as distance from zero by comparing it to opposite value

Practice Set A

Name:

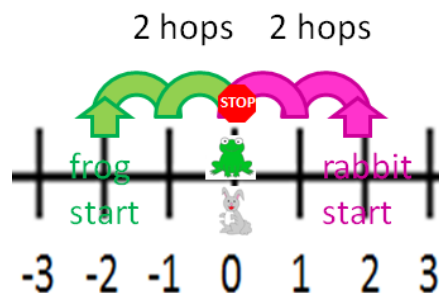
Date:

1. Look at the pictures below of the chickens crossing the road.



a. Explain how this illustrates OPPOSITE values. Be sure to include the words “zero” and “sign(s)” in your answer.

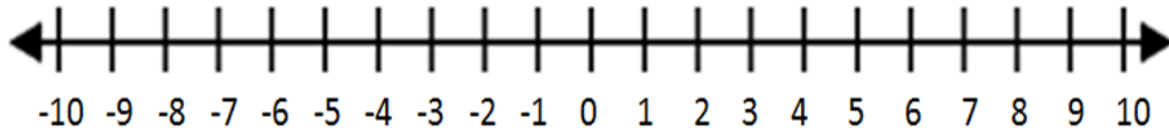
2. Look at the picture below of the frog and the rabbit.



a. The frog and the rabbit started from opposite locations. Explain how their starting points have the same ABSOLUTE VALUE. Be sure to include the word “distance” in your answer.

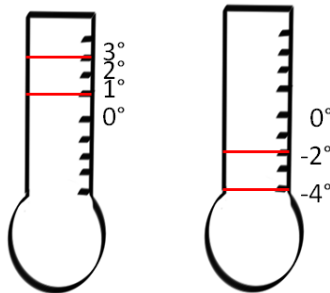
3. Absolute value is the distance (how many units away) a number is from zero. It is always written as a positive amount. Use the number line to help you with the questions

below.



- a. What is the absolute value of 5? _____
- b. What is the absolute value of -8? _____
- e. The absolute value of 9 is _____ but the opposite value of 9 is _____.
- f. The absolute value of -6 is _____ and the opposite value of -6 is _____.
- g. Is -4 the opposite value of 4 or the absolute value? _____
- c. $|4| =$ _____
- d. $|-7| =$ _____

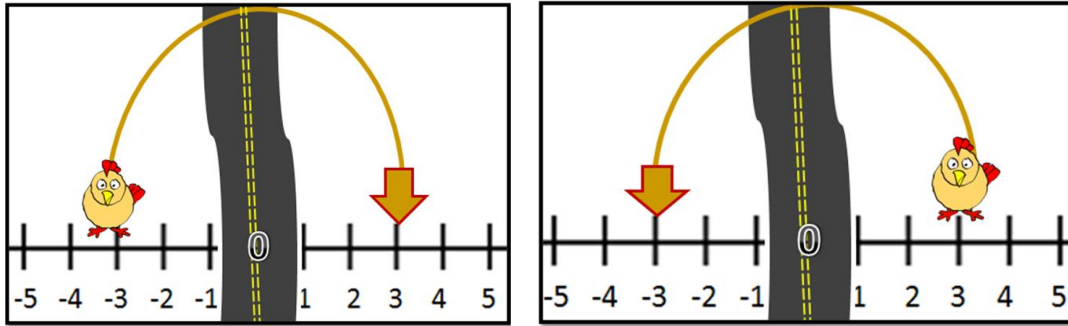
4. Look at the pictures below.



- a. Which is the greater (higher) temperature: 1° or 3° ? _____
- b. Which has the greatest absolute value (is further from 0): 1° or 3° ? _____
- c. Which is the greater (higher) temperature: -2° or -4° ? _____
- d. Which has the greatest absolute value (is further from 0): -2° or -4° ? _____
- e. Explain why the temperature with the greatest absolute value might be either the highest or the lowest temperature.

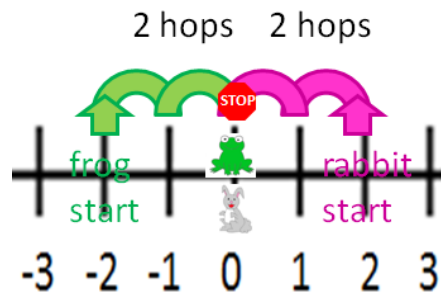
Understand absolute value as distance from zero by comparing it to opposite value, Practice Set A **Answer Key**

1. Look at the pictures below of the chickens crossing the road.



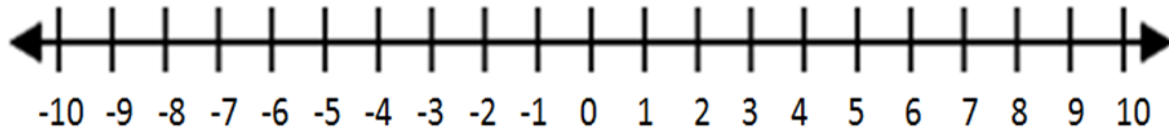
a. Explain how this illustrates OPPOSITE values. Be sure to include the words “zero” and “sign(s)” in your answer. **-3 and 3 are opposites; They are 3 units from zero on opposite sides and have opposite signs.**

2. Look at the picture below of the frog and the rabbit.



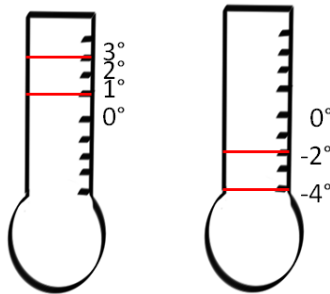
a. The frog and the rabbit started from opposite locations. Explain how their starting points have the same ABSOLUTE VALUE. Be sure to include the word “distance” in your answer. **The frog’s starting point of -2 has the same absolute value as the rabbit’s starting point of 2 because they each traveled a distance of 2 units or hops to get to zero.**

3. Absolute value is the distance (how many units away) a number is from zero. It is always written as a positive amount. Use the number line to help you with the questions below.



- a. What is the absolute value of 5? **5** c. $|4| =$ **4**
 b. What is the absolute value of -8? **8** d. $|-7| =$ **7**
 e. The absolute value of 9 is **9** but the opposite value of 9 is **-9**.
 f. The absolute value of -6 is **6** and the opposite value of -6 is **6**.
 g. Is -4 the opposite value of 4 or the absolute value? **opposite value**

4. Look at the pictures below.



- a. Which is the greater (higher) temperature: 1° or 3° ? **3°**
 b. Which has the greatest absolute value (is further from 0): 1° or 3° ? **3°**
 c. Which is the greater (higher) temperature: -2° or -4° ? **-2°**
 d. Which has the greatest absolute value (is further from 0): -2° or -4° ? **-4**
 e. Explain why the temperature with the greatest absolute value might be either the highest or the lowest temperature. **If the temperatures are above zero (positive), the highest one has the greatest absolute value. If the temperatures are below zero (negative), the lowest one has the greatest absolute value.**