

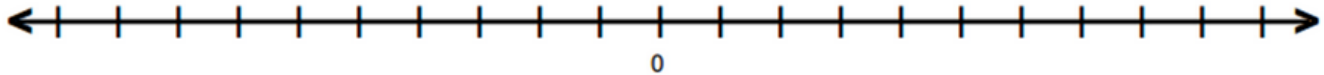
Unit 2.1 – Assessment

7 • 2.1

Name: _____ Period: _____ Date _____

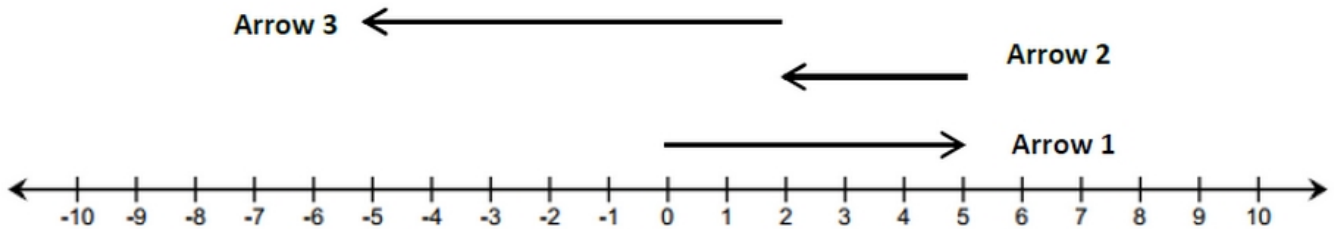
Problem 1.

During a football game, Kevin gained five yards on the first play. Then he lost seven yards on the second play. How many yards does Kevin need on the next play to get the team back to where they were when they started? Show your work.



Problem 2.

Use the diagram below to complete each part.



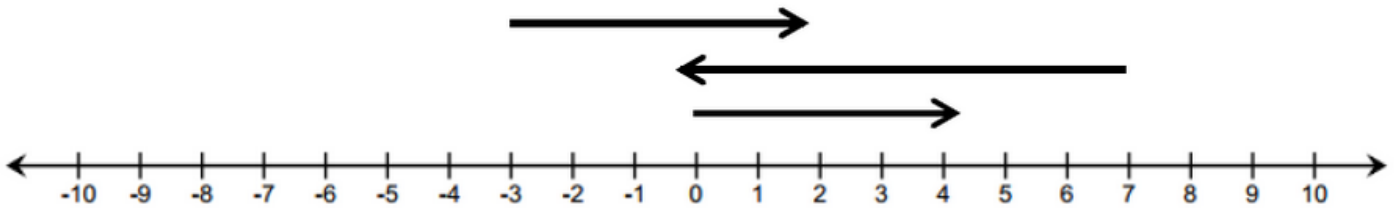
- Label each arrow with the number the arrow represents.
- How long is each arrow? What direction does each arrow point?

Arrow	Length	Direction
1		
2		
3		

- Write an equation that represents the sum of the numbers. Find the sum.

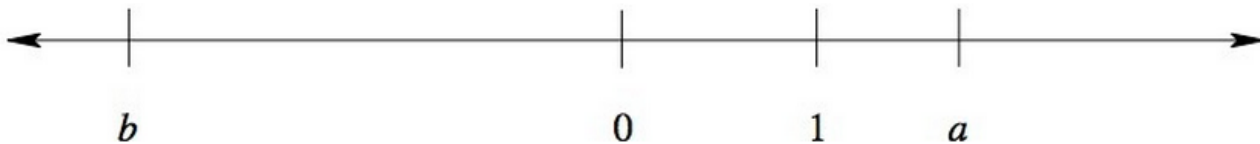
Problem 3.

Do the arrows correctly represent the equation $4 + (-7) + 5 = 2$? If not, draw a correct model below.



Problem 4.

A number line is shown below. The numbers 0 and 1 are marked on the line, as are two other numbers a and b .



Which of the following numbers is negative? Choose all that apply. Explain your reasoning.

- a. $a-1$
- b. $a-2$
- c. $-b$
- d. $a+b$

Problem 5.

Explain step by step, how to arrive at a single rational number to represent the following expression. Show both a written explanation and the related math work for each step.

$$-24 - \left(-\frac{1}{2}\right) - 12.5$$

Problem 6.

Show all steps taken to rewrite each of the following as a single rational number.

$$\frac{1}{5} + 20.3 - \left(-5\frac{3}{5}\right)$$

$$\frac{11}{12} - (-10) - \frac{5}{6}$$

Problem 7.

Model the following expression with positive (+) and negative (-) counters

2. $(4) + (-2) = \underline{\quad}$	3. $(6) - (7) = \underline{\quad}$
4. $(9) + (-2) = \underline{\quad}$	5. $(-7) - (-5) = \underline{\quad}$
6. $(-1) + (3) = \underline{\quad}$	7. $(-5) - (-3) = \underline{\quad}$