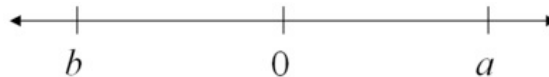


Congruency of Assessment Items/Tasks

GRADE	SAMPLE PROBLEM/TASK	STANDARD
	<p>Sierra walks her dog Pepper twice a day. Her evening walk is two and a half times as far as her morning walk. At the end of the week she tells her mom,</p> <p><i>"I walked Pepper for 30 miles this week!"</i></p> <p>How long is her morning walk?</p>	
	<p>a. Amy wants to build a cube with 3 cm sides using 1 cm cubes. How many cubes does she need?</p> <div data-bbox="829 814 1073 1016" style="text-align: center;"> </div> <p>b. How many 1 cm cubes would she need to build a cube with 6 cm sides?</p>	
	<p>Ocean water freezes at about $-2\text{ }^{\circ}\text{C}$. Fresh water freezes at 0°C. Antifreeze, a liquid used to cool most car engines, freezes at -64°C.</p> <p>Imagine that the temperature is exactly at the freezing point for ocean water. How many degrees must the temperature drop for the antifreeze to turn to ice?</p>	
	<p>Coffee costs $\\$18.96$ for 3 pounds.</p> <p>a. What is the cost per pound of coffee?</p> <p>b. Let x be the number of pounds of coffee and y be the total cost of x pounds. Draw a graph of the proportional relationship between the number of pounds of coffee and the total cost.</p> <p>c. Where can you see the cost per pound of coffee in the graph? What is it?</p>	

Congruency of Assessment Items/Tasks

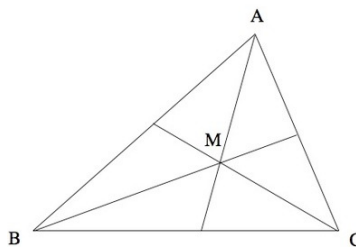


On the number line above, the numbers a and b are the same distance from 0.

What is $a + b$?

Explain how you know.

In triangle $\triangle ABC$, point M is the point of intersection of the bisectors of angles $\angle BAC$, $\angle ABC$, and $\angle ACB$. The measure of $\angle ABC$ is 42° , and the measure of $\angle BAC$ is 64° . What is the measure of $\angle BMC$?



For each pair of numbers, decide which is larger without using a calculator. Explain your choices.

- π^2 or 9
- $\sqrt{50}$ or $\sqrt{51}$
- $\sqrt{50}$ or 8
- -2π or -6

All the students at a middle school were asked to identify their favorite academic subject and whether they were in 7th grade or 8th grade. Here are the results:

Favorite Subject by Grade					
Grade	English	History	Math/Science	Other	Totals
7th Grade	38	36	28	14	116
8th Grade	47	45	72	18	182
Totals	85	81	100	32	298

Is there an association between favorite academic subject and grade for students at this school? Support your answer by calculating appropriate relative frequencies using the given data.

Congruency of Assessment Items/Tasks

	<p>Below are the 25 birth weights, in ounces, of all the Labrador Retriever puppies born at Kingston Kennels in the last six months.</p> <p>13 14 15 15 16 16 16 16 17 17 17 17 17 17 18 18 18 18 18 18 18 19 20</p> <p>a. Use an appropriate graph to summarize these birth weights. b. Describe the distribution of birth weights for puppies born at Kingston Kennels in the last six months. Be sure to describe shape, center and variability. c. What is a typical birth weight for puppies born at Kingston Kennels in the last six months? Explain why you chose this value.</p>	
	<p>The ratio of the number of boys to the number of girls at school is 4:5.</p> <p>a. What fraction of the students are boys? b. If there are 120 boys, how many students are there altogether?</p>	
	<p>The students in Mr. Sanchez's class are converting distances measured in miles to kilometers. To estimate the number of kilometers, Abby takes the number of miles, doubles it, then subtracts 20% of the result.</p> <p>Renato first divides the number of miles by 5, then multiplies the result by 8.</p> <p>a. Write an algebraic expression for each method. b. Use your answer to part (a) to decide if the two methods give the same answer.</p>	

