

**PRACTICE TEST WITH  
SAMPLE TEST ITEMS**

**BASED ON GRADE LEVEL STANDARDS**

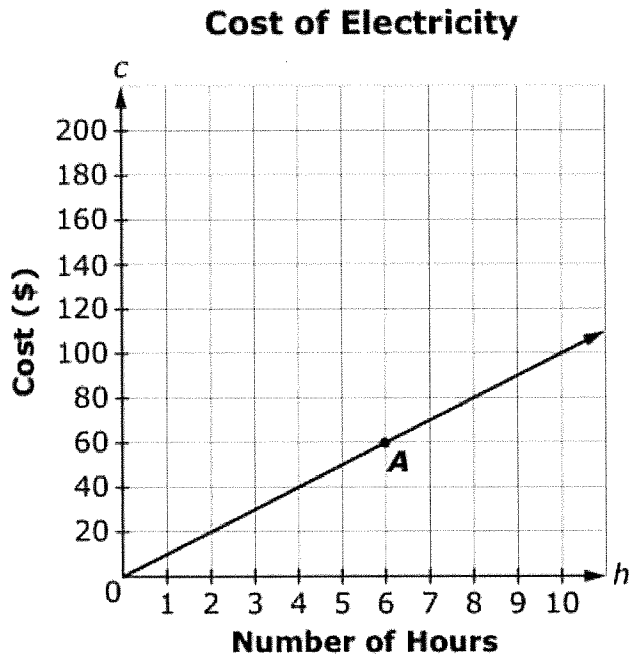
**MATH**

**SEVENTH GRADE**



Calculators allowed on following items.

5. This graph shows a proportional relationship between the number of hours ( $h$ ) a business operates and the total cost ( $c$ ) of electricity.



Select True or False for each statement about the graph.

	True	False
Point A represents the total cost of electricity when operating the business for 6 hours.	<input type="checkbox"/>	<input type="checkbox"/>
The total cost of electricity is \$8 when operating the business for 80 hours.	<input type="checkbox"/>	<input type="checkbox"/>
The total cost of electricity is \$10 when operating the business for 1 hour.	<input type="checkbox"/>	<input type="checkbox"/>

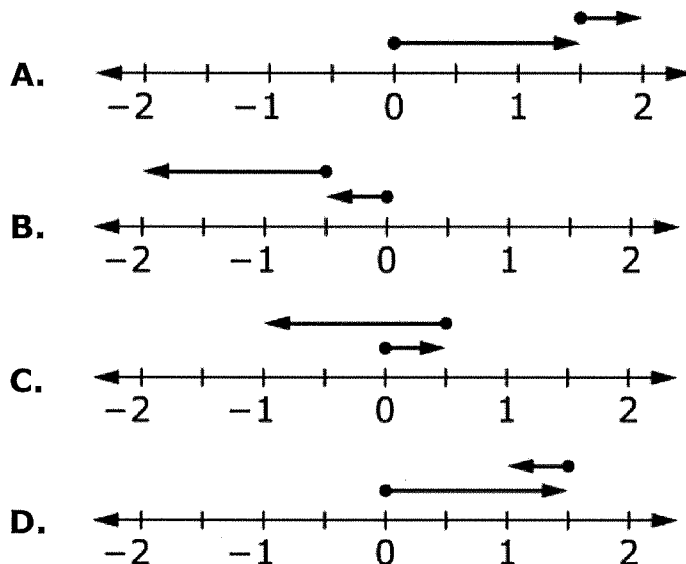
3. George earns \$455 per week. George receives a 20% raise.

How can George calculate his new weekly pay rate?

Select all calculations that will result in George's new weekly pay rate.

- divide \$455 by 0.20
- divide \$455 by 1.20
- multiply \$455 by 0.20
- multiply \$455 by 1.20
- solve for  $x$ :  $\frac{x}{455} = \frac{120}{100}$
- solve for  $x$ :  $\frac{455}{x} = \frac{20}{100}$

4. Which number line model represents the sum of  $1\frac{1}{2} + (-\frac{1}{2})$ ?



2. A representative sample of 50 students from a high school is surveyed. Each student is asked what science class he or she is taking.

This table shows the responses.

<b>Science Class</b>	<b>Number of Students</b>
Physics	6
Chemistry	10
Biology	18
Earth Science	4
Health Science	12

Select **all** of the statements that are valid based on the survey results.

- About 20% of students at the high school are taking Chemistry.
- About twice as many students are taking Health Science than are taking Physics.
- For every 150 students we could predict that at least 18 of the students are taking Physics.
- For every 25 students we could predict that at least 4 of the students are taking Earth Science.

No calculators allowed on items 1 to 4.

1. Which number line shows the solution to the inequality

$$-3x - 5 < -2?$$

