

## Lesson 8 Practice Problems

1. A number line can represent positions that are north and south of a truck stop on a highway. Decide whether you want positive positions to be north or south of the truck stop. Then plot the following positions on a number line.
  - a. The truck stop
  - b. 5 miles north of the truck stop
  - c. 3.5 miles south of the truck stop
  
2.
  - a. How could you distinguish between traveling west at 5 miles per hour and traveling east at 5 miles per hour without using the words “east” and “west”?
  
  - b. Four people are cycling. They each start at the same point. (0 represents their starting point.) Plot their finish points after five seconds of cycling on a number line
    - Lin cycles at 5 meters per second
    - Diego cycles at -4 meters per second
    - Elena cycles at 3 meters per second
    - Noah cycles at -6 meters per second

3. Find the value of each expression.

a.  $16.2 + -8.4$

b.  $\frac{2}{5} - \frac{3}{5}$

c.  $-9.2 + -7$

d.  $-4\frac{3}{8} - (-1\frac{1}{4})$

(From Unit 5, Lesson 6.)

4. For each equation, write two more equations using the same numbers that express the same relationship in a different way.

a.  $3 + 2 = 5$

b.  $7.1 + 3.4 = 10.5$

c.  $15 - 8 = 7$

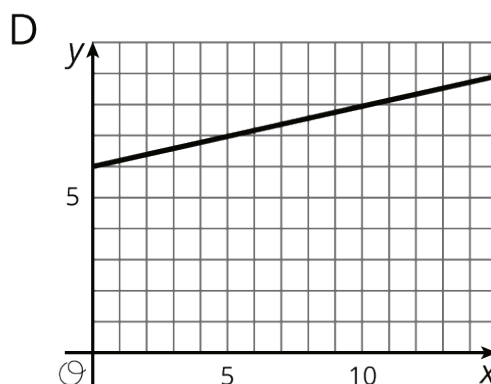
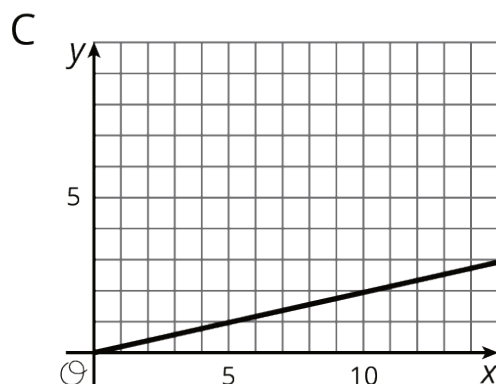
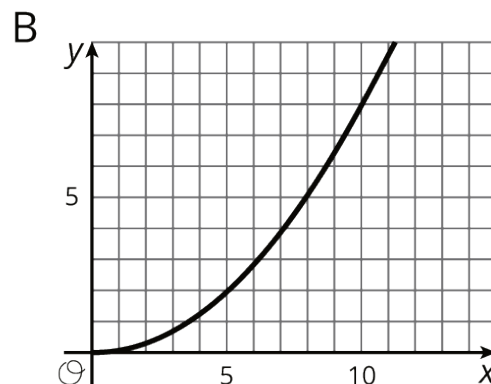
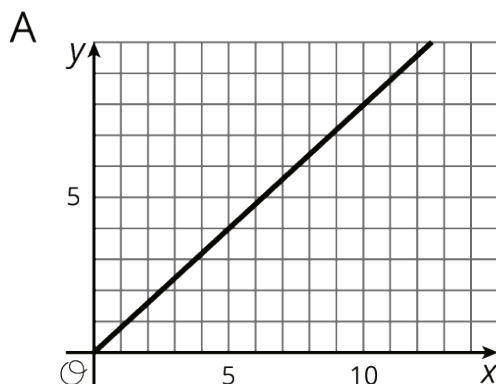
d.  $\frac{3}{2} + \frac{9}{5} = \frac{33}{10}$

(From Unit 5, Lesson 5.)

5. A shopper bought a watermelon, a pack of napkins, and some paper plates. In his state, there is no tax on food. The tax rate on non-food items is 5%. The total for the three items he bought was \$8.25 before tax, and he paid \$0.19 in tax. How much did the watermelon cost?

(From Unit 4, Lesson 10.)

6. Which graphs could not represent a proportional relationship? Explain how you decided.



(From Unit 2, Lesson 10.)