

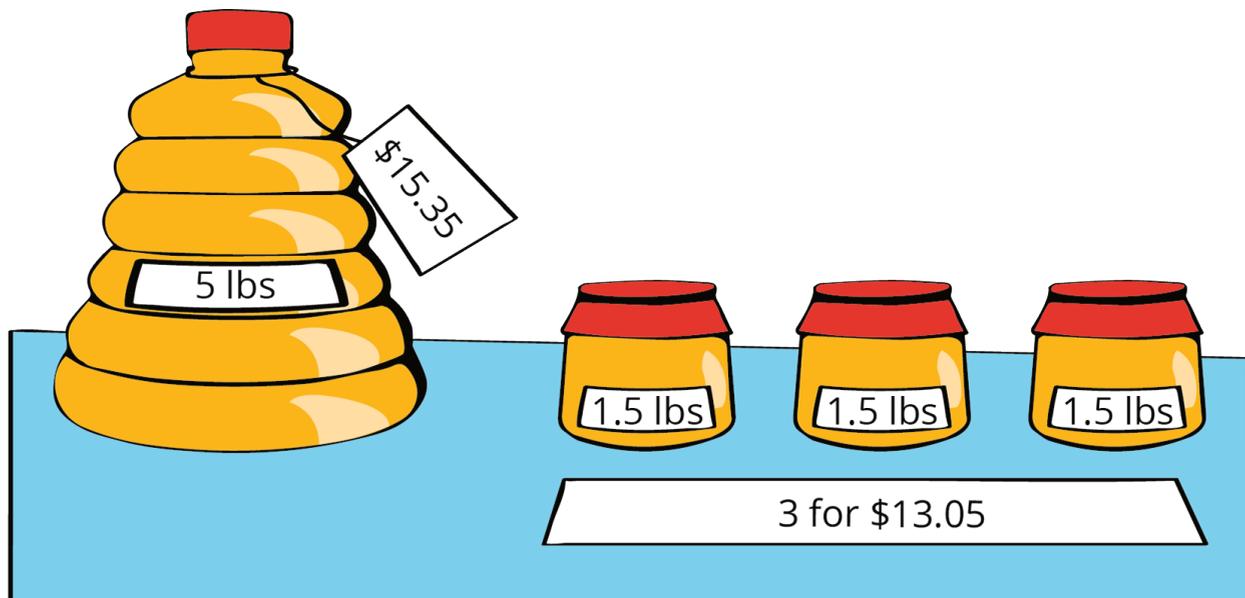
## Unit 6 Lesson 16: Two Related Quantities, Part 1

### 1 Which One Would You Choose? (Warm up)

#### Student Task Statement

Which one would you choose? Be prepared to explain your reasoning.

- A 5-pound jug of honey for \$15.35
- Three 1.5-pound jars of honey for \$13.05



## 2 Painting the Set

### Student Task Statement

Lin needs to mix a specific shade of orange paint for the set of the school play. The color uses 3 parts yellow for every 2 parts red.

1. Complete the table to show different combinations of red and yellow paint that will make the shade of orange Lin needs.

cups of red paint ( $r$ )	cups of yellow paint ( $y$ )	total cups of paint ( $t$ )
2	3	
6		
		20
	18	
14		
16		
		50
	42	

2. Lin notices that the number of cups of red paint is always  $\frac{2}{5}$  of the total number of cups. She writes the equation  $r = \frac{2}{5}t$  to describe the relationship. Which is the **independent variable**? Which is the **dependent variable**? Explain how you know.
3. Write an equation that describes the relationship between  $r$  and  $y$  where  $y$  is the independent variable.
4. Write an equation that describes the relationship between  $y$  and  $r$  where  $r$  is the independent variable.
5. Use the points in the table to create two graphs that show the relationship between  $r$  and  $y$ . Match each relationship to one of the equations you wrote.

