

Complete the Following Table with Equivalent Values

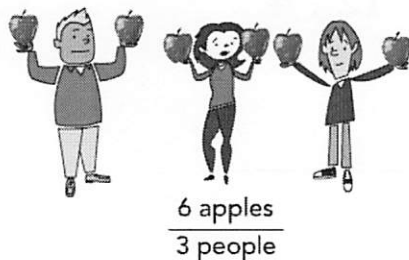
Ratio	Fraction	Decimal	Percent
		0.6	
	$\frac{3}{8}$		
			35%
10 : 5			
		2.75	
			4%
		1	

"I Can Calculate Unit Rate and Unit Price and Compare their Values to Interpret Real-World Situations."

Unit Rates

A **rate** is a ratio involving two quantities in different units.

Rate



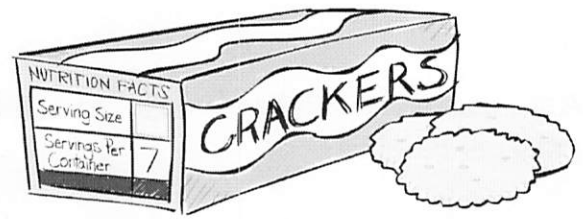
Unit Rate



A rate for one unit of a given quantity is called the **unit rate**. When a unit rate is written as a fraction, the denominator is 1 unit. The "1" in a unit rate is read as "**per.**"

Example

A box of crackers contains 84 crackers and has a total of 7 servings. How many crackers are there per serving?



Got It?

A basketball player scores 60 points in 4 games. What is the basketball player's unit rate for points per game?

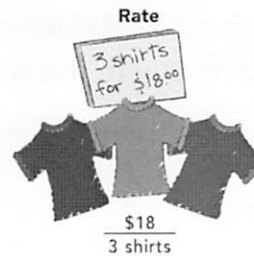
"I Can Calculate Unit Rate and Unit Price and Compare their Values to Interpret Real-World Situations."

Unit Prices

A **unit price** is a unit rate that gives the price of one item.

$$\frac{\text{total price}}{\text{total number of items}} = \frac{\text{unit price}}{1 \text{ item}}$$

\div total number of items (above the fraction bar)
 \div total number of items (below the fraction bar)



Example

What is the unit price of each item?

Shopping Cart				
	Item	Price	Quantity	Unit Price
a.	Movie Ticket	\$30	5	
b.	Pair of Jeans	\$75	3	
c.	Birthday Card	\$10	4	

Movie Ticket

_____ = _____

Pair of Jeans

_____ = _____

Birthday Card

_____ = _____

Got It?

A sports store sells 5 baseballs for \$12.50. What is the price per baseball?

Got It?

A pack of 6 bottles of a sports drink sells for \$4.50. What is the unit price of one bottle of the sports drink?

Example

A store sells orange juice in three different-sized containers. Order the containers from the best buy to the worst buy.

32 fl oz \$2.56



96 fl oz \$5.76



64 fl oz \$3.20



Complete the Following Table with Equivalent Values

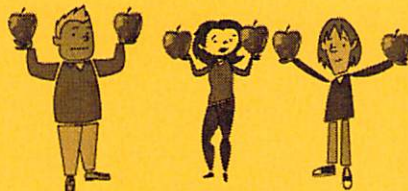
Ratio	Fraction	Decimal	Percent
3 : 5	$\frac{6}{10} = \frac{3}{5}$	0.6 $\times 100$	60%
3 : 8	$\frac{3}{8}$	0.375 $\times 100$	37.5%
7 : 20	$\frac{35}{100} = \frac{7}{20}$	0.35	35%
10 : 5	$\frac{10}{5} = 2$	2 $\times 100$	200%
11 : 4	$2\frac{3}{4} = \frac{11}{4}$	2.75 $\times 100$	275%
1 : 25	$\frac{4}{100} = \frac{1}{25}$	0.04	4%
1 : 1	$\frac{1}{1}$	1 $\times 100$	100%

"I Can Calculate Unit Rate and Unit Price and Compare their Values to Interpret Real-World Situations."

Unit Rates

A **rate** is a ratio involving two quantities in different units.

Rate



$\frac{6 \text{ apples}}{3 \text{ people}}$

Unit Rate



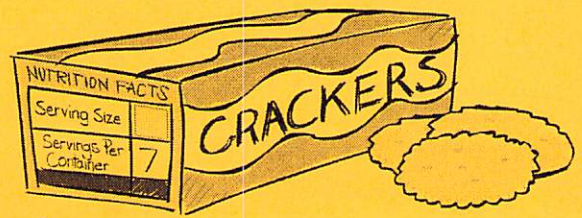
2 apples per person

for one

A rate for one unit of a given quantity is called the **unit rate**. When a unit rate is written as a fraction, the denominator is 1 unit. The "1" in a unit rate is read as "**per**."

Example

A box of crackers contains 84 crackers and has a total of 7 servings. How many crackers are there per serving?



$$\frac{84 \text{ crackers}}{7 \text{ servings}} = \frac{12 \text{ crackers}}{1 \text{ serving}}$$

for one

Got It?

A basketball player scores 60 points in 4 games. What is the basketball player's unit rate for points per game?

$$\frac{60 \text{ points}}{4 \text{ games}} = \frac{15 \text{ points}}{1 \text{ game}}$$

"I Can Calculate Unit Rate and Unit Price and Compare their Values to Interpret Real-World Situations."

Unit Prices

A **unit price** is a **unit rate** that gives the price of one item.

$$\frac{\text{total price}}{\text{total number of items}} = \frac{\text{unit price}}{1 \text{ item}}$$

÷ total number of items

÷ total number of items



Example

What is the unit price of each item?

Shopping Cart				
	Item	Price	Quantity	Unit Price
a.	Movie Ticket	\$30	5	\$6
b.	Pair of Jeans	\$75	3	
c.	Birthday Card	\$10	4	

Movie Ticket

$$\frac{\$30}{5 \text{ tickets}} = \frac{\$6}{1 \text{ ticket}}$$

Pair of Jeans

$$\frac{\$75}{3 \text{ pair}} = \frac{\$25}{1 \text{ pair}}$$

Birthday Card

$$\frac{\$10}{4 \text{ cards}} = \frac{\$2.50}{1 \text{ card}}$$

Got It?

A sports store sells 5 baseballs for \$12.50. What is the price per baseball?
for one

$$\frac{\$12.50}{5 \text{ baseballs}} = \frac{\$2.50}{1 \text{ baseball}}$$

Got It?

A pack of 6 bottles of a sports drink sells for \$4.50. What is the unit price of one bottle of the sports drink?

$$\frac{\$4.50}{6 \text{ bottles}} = \frac{\$0.75}{1 \text{ bottle}}$$

Example

A store sells orange juice in three different-sized containers. Order the containers from the best buy to the worst buy.



cheapest *expensive*

$$\frac{\$2.56}{32 \text{ fl oz}} = \frac{\$0.08}{1 \text{ fl oz}}$$

Worst Buy



$$\frac{\$5.76}{96 \text{ fl oz}} = \frac{\$0.06}{1 \text{ fl oz}}$$



$$\frac{\$3.20}{64 \text{ fl oz}} = \frac{\$0.05}{1 \text{ fl oz}}$$

Best Buy