A **unit rate** is a rate with a denominator of 1.

Examples: 50 miles per hour, 50 $\frac{mi}{hr}$

To find a unit rate, divide the numerator and denominator.

Example: Jeff drove 360 miles on 12 gallons of gas

$$\frac{360 \, miles}{12 \, gallons}$$

Sep 29-7:02 PM

Find the unit rate (cost per ounce) for
each amount of apple juice.
Which size has the lowest cost per ounce?

Price	Amount
$.72	16 oz
$1.20	32 oz
$1.60	64 oz

Sep 29-8:41 PM

Find the unit rate (cost per ounce) for
each amount of apple juice.
Which size has the lowest cost per ounce?

Price	Amount
$.72	16 oz
$1.20	32 oz
$1.60	64 oz

Sep 29-9:39 PM

Find the unit rate (dollars per hour) for each job.
Which job will you make the most money per hour?

Job	Earnings	Hours worked
Nurse	$156	12 hrs
Waitress	$75	7 hrs
Sales clerk	$84	8 hrs

Sep 29-9:39 PM

Suppose you walk 2 miles in 32 minutes.

1. Find your average walking speed (unit rate).

2. Write a rule describing the distance (d) you walk as a result of the time (t) you walk.

How far can you walk in 60 minutes?

Sep 29-8:57 PM

Suppose you drive 140 miles in 2 hours.

1. Find your average driving speed (unit rate).

2. Write a rule describing the distance (d) you travel as a result of the time (t) you drive.

How far can you walk in 9 hours?

Sep 29-8:57 PM

Converting Factors

Suppose you drive 360 miles per day.
What is your average driving speed in miles per hour?

Sep 29-9:01 PM

Suppose you ran 2 miles in 15 minutes.
What was your average speed in miles per hour?

Sep 29-9:11 PM

Find the unit rate for each situation.

a) driving 180 km in 3 hours

b) 54 hot dogs for 18 people

c) 160 words typed in 4 minutes

d) $27.40 for 4 hours of work

e) $12.66 for 8 packages of juice boxes

f) $284 for a 4 day car rental

g) 560 heartbeats in 6.5 minutes

h) jogging 3.5 km in 30 minutes

i) a convenience store has 15 customers in 20 minutes

j) the temperature changes by -16°C in 4 hours

2. A student worked 5 days/week and 8 h/day. He earned $300/week. What was his hourly rate of pay?

Nov 20-11:27 AM

Decide which is the better value based on the unit prices.

a) $25.00 for concert tickets for 2 people or $36.00 for concert tickets for 3 people.

b) $380 for a bus for 32 people or $420 for a bus for 38 people.

c) $4.25 for 4 L of milk or $2.55 for 2 L of milk.

d) 35 g of mixed nuts for $0.99 or 50 g of mixed nuts for $1.49.

e) inline skate rentals at $30.00 for 4 hours or $54.00 for 7 hours.

f) 1 L of pop for $0.90 or a case of 24 cans of 355 mL of pop for $4.25.

g) 500 sheets of paper for $9.45 or 4500 sheets of paper for $49.00.

h) 25 L of gas for $21.50 or 35 L of gas for $40.00.

Nov 20-11:29 AM