RATIOS & RATES PRACTICE

Alexis ran 24 miles in 3 hours. What was her average speed in miles per hour?

① UNIT RATE

**Write the rate as a fraction. Then find an equivalent rate with a denominator of 1. Remember to always LABEL! LABEL! LABEL!

24 miles in 3 hours = $\frac{24 \text{ mi}}{3 \text{ h}} = \frac{8 \text{ mi}}{1 \text{ h}}$ ÷3 ÷3

Alexis's average speed, or unit rate, was ___ 8 miles per hr. 8 mi/hr 8 mph

Let's Practice Together!!   price   unit

1. Find the unit price if it costs $2 for 6 oranges. Round to the nearest cent if necessary.

what we know! → $\frac{\$2}{6 \text{ ora}} = \frac{\$0.33}{1 \text{ ora}}$ ÷6   6⟌2.00   ←1 UNIT!!

2. Find the unit price if it costs $300 for 6 hours of work. Round to the nearest cent if necessary.

$\frac{\$300}{6 \text{ hr}} = \frac{\$50}{1 \text{ hr}}$ ÷6 ÷6 1 unit

Use the unit rate to solve 2-step problems.

3. Lexi painted 3 faces in 12 minutes at the Arts and Crafts fair. At this rate, how many faces can she paint in 40 minutes?

$\frac{4 \text{ min}}{1 \text{ face}}$ $\frac{12 \text{ min}}{3 \text{ face}}$ $\frac{40 \text{ min}}{10 \text{ face}}$
÷3 ÷3   ×10

4. Kimberly bought 4 notebooks for $6.32. At the same unit price, how much would she pay for 5 notebooks?

* $\frac{\$1.58}{1 \text{ N}} = \frac{\$6.32}{4 \text{ N}} = \frac{\$7.90}{5 \text{ N}}$ ÷4 ÷4 ×5 ×5

1.58 ④
+ 6.32 ④
7.90 ⑤

Find the unit rate.

5. A truck can travel 90 miles on 15 gallons of gas.

$\frac{90 \text{ mi}}{15 \text{ g}}$ $\frac{6 \text{ mi}}{1 \text{ g}}$

6. A file can download 1,680 kilobytes in 4 minutes.

$\frac{1680 \text{ kilo}}{4 \text{ min}}$ $\frac{420 \text{ kilo}}{1 \text{ min}}$

7. At Kroger you can buy 5 pounds of apples of $2.45.

$\frac{\$2.45}{5 \text{ lb}}$ $\frac{\$.49}{1 \text{ lb}}$

8. A horse can travel 52 feet in 16 seconds.

$\frac{52 \text{ ft}}{16 \text{ sec}}$ $\frac{3.25 \text{ ft}}{1 \text{ sec}}$

9. Tito wants to buy some peanut butter to donate to the local food pantry. If Tito wants to save as much money as possible, which brand should he buy?

Round to the nearest cent

→ Grandma's PB

Brand	Sale Price
Nutty	12 ounces for $2.19
Grandma's	18 ounces for $2.79
Bee's	28 ounces for $4.69
Save-A-Lot	40 ounces for $6.60

Ratio Review

1. Julie can make 3 batches of brownies in 2 hours. Her goal is to bake 12 batches of brownies each day. Use the table to find how many hours Julie will need to bake to reach her goal?

Batches of Brownies	3			12
Hours	2			

2. Each batch of brownies will be sold for $2.00. How much money will Julie make if she sells 6 batches?

Determine if the ratios are proportional.

3. $12 saved after 2 weeks; $36 saved after 6 weeks

4. $9 for 3 magazines; $20 for 5 magazines

5. A music store is having a sale where you can buy 2 new-release CD's for $22 or you can buy 4 new release CD's for $40. Are these rates proportional?

Word Problems   SHOW YOUR WORK!

6. Thomas spent $24 on two pairs of sunglasses. At this rate, how much would 6 pairs cost?

7. Four students spent $12 on lunch. At this rate, find the amount 10 students would spend on the same lunch?

8. There are 404 calories in 2 scoops of vanilla ice cream. How many calories are there in 3 scoops of vanilla ice cream?