

1.1 Unit Rates

PRACTICE

The following rates are about the amount of snowfall. Determine if they are unit rates. Circle YES or NO.

1. $\frac{7 \text{ inches}}{8 \text{ days}}$

Unit Rate? YES or **NO**
per 8 days

2. $\frac{6 \text{ inches}}{1 \text{ day}}$

Unit Rate? **YES** or NO
per day

3. 5 inches per day

Unit Rate? **YES** or NO
per day

4. 5 inches per 2 days

Unit Rate? YES or **NO**
per 2 days

5. $\frac{3}{2}$ inches per day

Unit Rate? **YES** or NO
per day

6. 0.35 inches per day

Unit Rate? **YES** or NO
per day

Write the following as rates both ways. Determine which rate is better to use. Express fractions in simplest form!

7. Teri pays 4 dollars for 2 gallons of milk.

$$\frac{2 \text{ gallons}}{4 \text{ dollars}} = \frac{1}{2}$$

$$\frac{4 \text{ dollars}}{2 \text{ gallons}} = \frac{2}{1}$$

$\frac{1}{2}$ gallons per dollar **2** dollars per gallon

Which rate is better to use? Circle it above!

8. Patrick eats 12 crabby patties every 3 hours.

$$\frac{12 \text{ patties}}{3 \text{ hours}} = \frac{4}{1}$$

$$\frac{3 \text{ hours}}{12 \text{ patties}} = \frac{1}{4}$$

4 patties per hour $\frac{1}{4}$ hours per patty

Which rate is better to use? Circle it above!

9. You babysit 5 hours and make 30 dollars.

$$\frac{30 \text{ dollars}}{5 \text{ hours}} = \frac{6}{1}$$

$$\frac{5 \text{ hours}}{30 \text{ dollars}} = \frac{1}{6}$$

6 dollars per hour $\frac{1}{6}$ hours per dollar

Which rate is better to use? Circle it above!

10. The speed limit is 60 mph on the highway.

$$\frac{60 \text{ miles}}{1 \text{ hour}} = \frac{60}{1}$$

$$\frac{1 \text{ hour}}{60 \text{ miles}} = \frac{1}{60}$$

60 miles per hour $\frac{1}{60}$ hours per mile

Which rate is better to use? Circle it above!

11. Sully visits the gym 3 times every 2 weeks.

$$\frac{2 \text{ weeks}}{3 \text{ visits}} = \frac{2}{3}$$
$$\frac{3 \text{ visits}}{2 \text{ weeks}} = \frac{3}{2}$$

$\frac{2}{3}$ weeks per visit $\frac{3}{2}$ visits per week

Which rate is better to use? Circle it above!

12. BP sells 2 gallons of gas for 6 dollars.

$$\frac{2 \text{ gallons}}{6 \text{ dollars}} = \frac{1}{3}$$
$$\frac{6 \text{ dollars}}{2 \text{ gallons}} = \frac{3}{1}$$

$\frac{1}{3}$ gallons per dollar 3 dollars per gallon

Which rate is better to use? Circle it above!

Write the following as a unit rate. Label your answer! Round to nearest hundredth.

13. Thanos collects 2 infinity stones in 5 weeks.

$$\frac{2 \text{ stones}}{5 \text{ weeks}} = 0.4 \text{ stones per week}$$

OR

$$\frac{5 \text{ weeks}}{2 \text{ stones}} = 2.5 \text{ weeks per stone}$$

14. Apple store gets 300 customers in 5 days.

$$\frac{300 \text{ customers}}{5 \text{ days}} = 60 \text{ customers per day}$$

OR

$$\frac{5 \text{ days}}{300 \text{ customers}} = 0.02 \text{ days per customer}$$

15. Peanuts costs \$8.50 for 2 pounds.

$$\frac{8.50 \text{ dollars}}{2 \text{ pounds}} = 4.25 \text{ dollars per pound}$$

OR

$$\frac{2 \text{ pounds}}{8.50 \text{ dollars}} = 0.24 \text{ pounds per dollar}$$

Determine which deal is better. Justify your solution using unit rates. Round to nearest hundredth.

16.

STORE A
5 dollars for
4 markers

$$\frac{5 \text{ dollars}}{4 \text{ markers}} = 1.25 \text{ dollars per marker}$$

STORE B
8 dollars for
6 markers

$$\frac{8}{6} = 1.50$$

STORE A is better because they charge \$1.25 per marker instead of \$1.50 per marker.

17.

STORE A
6 ounces for \$2.40

$$\frac{2.40 \text{ dollars}}{6 \text{ ounces}} = 0.40 \text{ dollars per ounce}$$

STORE B
3 ounces for \$1.80

$$\frac{1.80}{3} = 0.60$$

STORE A is better because they charge \$0.40 per ounce instead of \$0.60 per ounce.

18.

STORE A
32 ounce Gatorade for \$2.50

$$\frac{2.50 \text{ dollars}}{32 \text{ ounces}} = 0.08 \text{ dollars per ounce}$$

STORE B
16 ounce Gatorade for \$1.50

$$\frac{1.50}{16} = 0.09 \text{ dollars per ounce}$$

STORE A is better because they charge \$0.08 per ounce instead of \$0.09 per ounce.

19.

STORE A
3 months of service
for 40 dollars

$$\frac{40 \text{ dollars}}{3 \text{ month}} = 13.33 \text{ dollars per month}$$

STORE B
12 months
1 year of service
for \$150

$$\frac{150}{12} = 12.5$$

STORE B is better because they charge \$12.50 per month instead of \$13.33 per month.