

Unit rate problems

Name: Answers

Find the unit rate to solve the following problems:

1. Which is the better deal: 3 cans of soda for \$1.27 or 5 cans of soda for \$1.79?

$$\frac{1.27}{3} = \frac{x}{1}$$

$$x = 0.42\bar{3} \approx \$0.42$$

$$\frac{1.79}{5} = \frac{x}{1}$$

$$x = 0.358 \\ \$0.36$$

The better deal is to buy 5 cans for \$1.79.

2. Which is traveling faster: Traveling 300 km in 5 hours or traveling 250 km in 4 hours?

$$\frac{300}{5} = \frac{x}{1}$$

$$60 \text{ km/h}$$

$$\frac{250}{4} = \frac{x}{1}$$

$$62.5 \text{ km/h}$$

It is faster to travel 250 km in 4 hours.

3. A store has two different brands of laundry detergent. Brand A can do 80 loads of laundry and costs \$12.75. Brand B does 36 loads of laundry and costs \$6.75. Which laundry detergent costs less per load?

$$A \quad \frac{\$12.75}{80}$$

$$B \quad \frac{\$6.75}{36}$$

Brand A cost less per load.

$$= \$0.16 \text{ per load}$$

$$\$0.19 \text{ per load}$$

4. Joe was planning a business trip to Canada, so he went to the bank to exchange \$200 U.S. dollars for Canadian (CDN) dollars (at a rate of \$1.02 CDN per \$1 US). On the way home from the bank, Joe's boss called to say that the destination of the trip had changed to Mexico City. Joe went back to the bank to exchange his Canadian dollars for Mexican pesos (at a rate of 10.8 pesos per \$1 CDN). How many Mexican pesos did Joe get?

$$\frac{\text{US } 200}{\text{CAN } x} = \frac{1}{1.02}$$

$$\$ 204$$

$$\frac{\text{CAN } 204}{\text{MEX } x} = \frac{1}{10.8}$$

$$₱ 2,203.20$$

After the exchanges, Joe had ₱ 2,203.20.