

Name _____

Date _____

Unit Rates with Speed and Price - Guided Lesson Explanation

Explanation#1

Step 1) We have to find the unit rate.

$$\frac{8 \text{ dresses}}{2 \text{ weeks}} = 4 \text{ dresses per week}$$

Step 2) Now we have to use the unit rate in the formula.

$$\begin{aligned} \text{Stitched dresses} &= \text{unit rate} \times \text{weeks worked} \\ &= 4 \times 7 \\ &= 28 \end{aligned}$$

So, after 7 weeks 28 dresses should be stitched.

Explanation#2

Step 1) First we have to find the unit rate.

$$\frac{\$20}{2 \text{ people}} = \$10 \text{ per person}$$

Step 2) Now we have to use the unit rate in the formula.

$$\begin{aligned} \text{Total people} &= \text{unit rate} \times \text{costs} \\ 20 &= 10 \times n \\ 200 &= n \end{aligned}$$

Maria has to bear \$200 in expenses, if she invites 20 guests.



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Explanation#3

Step 1) Unit rates again. Big surprise!

$$\frac{75 \text{ kilometers}}{1 \text{ hour}} = 75 \text{ kilometers per hour}$$

Step 2) Now we have to use the unit rate in the formula.

$$\text{Total kilometers} = \text{unit rate} \times \text{hours}$$

$$= 75 \times 5$$

$$= 375$$

So, he can ride an additional 375 kilometers in 5 hours.

