

Algebra 2

Data Updates

Chapter 1

Lesson 1.1, page 6, Focus on Applications, Money Exchange

In 1999, 17,743,000 United States citizens visited Mexico and spent \$7,034,000,000. That same year 9,915,000 Mexican citizens visited the United States and spent \$5,064,000,000.

Lesson 1.1, page 6, Example 7, Money Exchange

The exchange rate is 9.1 pesos per dollar.

Solution (b):

$$\begin{aligned} (400 \cancel{\text{dollars}}) \left(\frac{9.1 \text{ pesos}}{1 \cancel{\text{dollar}}} \right) &= (400 \times 9.1) \text{ pesos} \\ &= 3640 \text{ pesos} \end{aligned}$$

You receive 3640 pesos for \$400.

Solution (c):

$$\begin{aligned} \frac{425 \text{ pesos}}{9.1 \text{ pesos per dollar}} &= (425 \cancel{\text{ pesos}}) \frac{1 \text{ dollar}}{9.1 \cancel{\text{ pesos}}} \\ &= \frac{425}{9.1} \text{ dollars} \\ &\approx \$47 \end{aligned}$$

You receive about \$47 for 425 pesos.

Lesson 1.2, page 16, Exercise 58, Physical Therapy

In 1998 there were approximately 109,000 physical therapy jobs in the United States. The number of jobs in the next ten years is expected to increase by 3761 per year. Write an expression that gives the total number of physical therapy jobs each year since 1998. Evaluate the expression for the year 2008.

Answer: $3761t + 109,000$ where t is the number of years since 1998; 146,610 jobs