

## Exercises - Ratios, Rates, and Proportions Word Problems

1

If 20 machines produce 1,240 printers in a day, how many more machines are needed to produce 1,984 printers in a day?

- A) 12
- B) 20
- C) 24
- D) 32

2

If  $\frac{3}{4}$  quart of lemonade concentrate is mixed with  $6\frac{2}{3}$  quarts of water to make lemonade for 40 people, how many quarts of lemonade concentrate are needed to make the lemonade for 24 people?

- A)  $\frac{3}{10}$
- B)  $\frac{7}{20}$
- C)  $\frac{2}{5}$
- D)  $\frac{9}{20}$

3

A machine produced 735 tapes in  $5\frac{1}{4}$  hours. What fraction of the 735 tapes was produced in one hour?

- A)  $\frac{1}{7}$
- B)  $\frac{4}{21}$
- C)  $\frac{5}{21}$
- D)  $\frac{2}{7}$

4

A 32-acre field yields 768 bushels of corn each year. How many more acres are needed to yield 960 bushels of corn each year?

- A) 6
- B) 8
- C) 10
- D) 12

5

The length of a rectangle is 8 inches longer than the width. If the ratio of the length to perimeter is 5:16, what is the area of the rectangle?

- A)  $160 \text{ in}^2$
- B)  $180 \text{ in}^2$
- C)  $240 \text{ in}^2$
- D)  $280 \text{ in}^2$

6

If 12 grams of coffee costs  $x$  dollars and each gram makes  $y$  cups of coffee, what is the cost of one cup of coffee in terms of  $x$  and  $y$ ?

- A)  $\frac{12y}{x}$
- B)  $\frac{y}{12x}$
- C)  $\frac{12x}{y}$
- D)  $\frac{x}{12y}$