

## Quiz for Lessons 2-6 Through 2-10

### 2-6 Rates, Ratios, and Proportions

- Last week, the ratio of laptops to desktops sold at a computer store was 2:3. Eighteen desktop models were sold. How many laptop models were sold?
- Anita read 150 pages in 5 hours. What is her reading rate in pages per minute?

Find the unit rate.

- Twenty-six crackers contain 156 Calories.
- A store developed 1024 photographs in 8 hours.

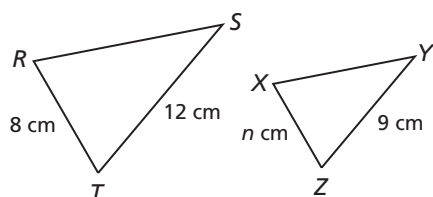
Solve each proportion.

- $\frac{-18}{n} = \frac{9}{2}$
- $\frac{d}{5} = \frac{2}{4}$
- $\frac{4}{12} = \frac{r+2}{16}$
- $\frac{-3}{7} = \frac{6}{x+6}$

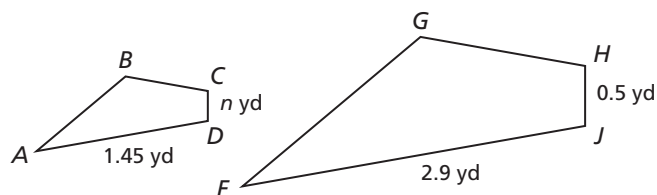
### 2-7 Applications of Proportions

Find the value of  $n$  in each diagram.

9.  $\triangle RST \sim \triangle XYZ$



10.  $ABCD \sim FGHI$



### 2-8 Percents

- Find 40% of 25.
- Find 130% of 9.
- 35 is what percent of 70?
- What percent of 400 is 640?
- 16 is 80% of what number?
- 200% of what number is 28?
- A volunteer at the zoo is responsible for feeding the animals in 15 exhibits in the reptile house. This represents 20% of the total exhibits in the reptile house. How many exhibits are in the reptile house?

### 2-9 Applications of Percents

- Peter earns \$32,000 per year plus a 2.5% commission on his jewelry sales. Find Peter's total salary for the year when his sales are valued at \$420,000.
- Estimate the tax on a \$21,899 car when the tax rate is 5%.

### 2-10 Percent Increase and Decrease

Find each percent change. Tell whether it is a percent increase or decrease.

- from 60 to 66
- from 48 to 12
- from 200 to 80
- from 9.8 to 14.7
- Andrea purchased a picture frame for \$14.56. This price was a 30% markup from the wholesale cost. What was the wholesale cost?