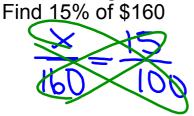
Warm-Up	Fraction	Decimal	Percent
An apple grower's cooperative has 250 members. If 100 of the growers use a certain insecticide, find the portion that do not use the insecticide.	$3\frac{1}{4}$ $2\frac{4}{5}$	1.7	
$\frac{part}{whole} = \frac{1}{100}$ $\frac{part}{whole} = \frac{1}{100}$ $\frac{1}{100} = \frac{1}{100}$ $\frac{1244}{x} = \frac{1}{12.75}$ $\frac{12.75}{100} = \frac{1}{100}$ $\frac{1}{100} = \frac{1}{100}$	× × × 5	89.6x = 5 80.6 5.8	× 000 89.6 89.6 55.87.

6.4 Using Proportions to Solve Percent Problems

Ex 1 Finding the Part



$$\frac{100 \times = 15.160}{100 \times = 2400}$$

Ex 2 Finding the Part (Use multiplication)

a) Find 42% of §30 yards

b) Find 25% of 1680 cars

0.42·(830) 348.60 yds

c) Find 140,% of 60 miles

d) Find 0.4% of 50 km

* 1.40(60) 84.00 miles

Ex 3 Application Problem

Raley's market has 850 employees. Of these employees, 28% are students. How many actual students work at Raley's market?

$$\frac{x}{850} = \frac{28 \cdot 14}{100} \frac{7}{500}$$

$$\frac{x}{850} = \frac{28 \cdot 14}{100} \frac{7}{500}$$

$$\frac{25x}{25} = \frac{5950}{25}$$

$$\frac{25x}{25} = \frac{5950}{25}$$

$$\frac{25x}{25} = \frac{5950}{25}$$

$$\frac{23x}{25} = x$$

$$\frac{25x}{25} = \frac{5950}{25}$$

$$\frac{25x}{25} = \frac{25x}{25}$$

$$\frac{25x}{2$$

b) 135 tourists is 15% of what number of tourists?

$$\frac{135}{x} = \frac{15}{100} \quad x = 900$$
 tourists

Ex 5 Application

At Newark Salt Works, 78 employees are absent because of an illness. If this is 5% of the total workers, how many are actually employed?

$$\frac{78}{x} = \frac{5}{100}$$
 $\frac{5x = 7800}{s}$
 $x = 1560$ workers

Ex 6 Application

A roof is expected to last 20 years before needing a replacement. If the roof is 15 years old now, what percent of the roof's life has been used?

$$\frac{315}{420} = \frac{\times}{100}$$
0.75 \rightarrow 75%

Ex 7 Application

Rainfall this year was 33 inches, while normal rainfall is only 30 inches. What percent of normal rainfall is this year's rainfall?

$$4 \frac{30}{30} = \frac{100}{100}$$
 110%