2.4 Practice   Name **Solutions**

Pick a variable, explain what the variable represents, and
translate each problem to an equation and SOLVE.

1. What percent of 240 is 60?

$$\frac{X(240)}{240} = \frac{60}{240}$$

$$X = \frac{60}{240} \rightarrow X = \frac{1}{4}$$

Explain Variable __$X = percent$__

Equation __$X(240) = 60$__

Answer __$X = 25\%$__

2. What percent of 160 is 56?

$$\frac{X(160)}{160} = \frac{560}{160}$$

$$X = \frac{56}{160} \rightarrow X = \frac{7}{20}$$

Explain Variable __$X = percent$__

Equation __$X(160) = 56$__

Answer __$X = 35\%$__

3. What number is 65% of 2?

$$X = 0.65(2)$$

$$X = 1.3$$

Explain Variable __$X = number$__

Equation __$X = 0.65(2)$__

Answer __$X = 1.3$__

4. 26.25 is 17.5% of what number?

$$\frac{26.25}{0.175} = \frac{0.175(X)}{0.175}$$

$$150 = X$$

Explain Variable __$X = number$__

Equation __$26.25 = 0.175(X)$__

Answer __$X = 150$__

5. What number is 4% of 840?

$$X = 0.04(840)$$

$$X = \boxed{33.6}$$

Explain Variable __$X = number$__

Equation __$X = 0.04(840)$__

Answer __$X = 33.6$__

Pick a variable, explain what the variable represents, and
translate each problem to an equation and SOLVE.

6. Of the 8760 hours in a year, one television was on for 2628 hours. What percent is this?

$X = \text{Percent}$

8760 hours in whole year
2628 hours in part when TV was on
A Percent of whole is Part

$$\frac{X(8760)}{8760} = \frac{2628}{8760} \longrightarrow X = .3$$

TV was on 30% of the Time

7. Jeanne left a 12% tip on a meal. Including the tip, its cost was $50.40.
What was the cost of the meal before the tip?

$X = \text{COST}$
$50.40 \quad \text{TOTAL}$
$\text{Tip} = \text{Percent of cost}$
$\text{Tip} = 0.12(x)$

$\text{TOTAL} = \text{COST} + \text{TIP}$
$50.40 = X + 0.12(x)$

$$\frac{50.40}{1.12} = \frac{1.12x}{1.12}$$

$45 = X \longrightarrow$

COST was $45

Lightning strikes kill people in various locations. The
graph details these locations and the percentage of
lightning deaths that occur.
From 1960 to 1992, there were 2897 people killed by
lightening. In each of Exercises 11–13, determine the
number of people killed from 1960 to 1992 in each
location. Round to the nearest whole number.

Deaths Due to Lightning

Other 38%   Fields 28%

Golf Courses 4%   Under Trees 17%

In Water 13%
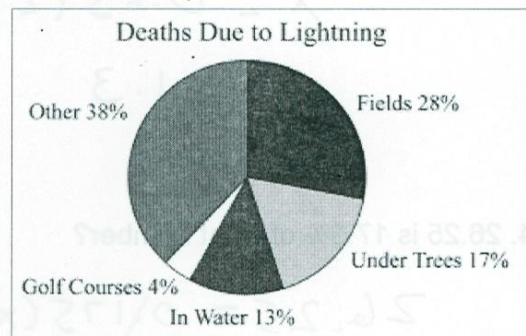
8. In fields $= \text{Part}$

Percent of whole is Part
$(0.28)(2897) = 811.16$

About 811 killed in feilds

2897 people killed by lightning (whole)

9. Under trees $= \text{Part}$

A percent of whole $= \text{Part}$
$(0.17)(2897) = 492.49 \longrightarrow$ About 492 killed under Trees

10. At golf courses

$(0.04)(2897) = 115.88 \longrightarrow$ About 116 killed on Golf Course