

2.9 Percent Equations

0%

A. Prior Knowledge

~ Percents compare whole quantities, represented by 100%, and parts of the whole.

~ You can use the percent proportion:

$$\frac{\textit{part}}{\textit{whole}} = \frac{p}{100} \quad \dots \textit{of whole.}$$

B. Converting Words to Symbols

| <i>Word</i> | <i>Symbol</i> |
|-------------|---------------|
| what | • |
| of | • |
| is | • |

CAUTION

When dealing with percents, do NOT forget to move the
~ decimal TWO places.

C. Practice Makes Perfect

1. What is 35% of 80?

28

$$\frac{\textit{part}}{\textit{whole}} = \frac{p}{100} \quad \dots \textit{of whole.}$$

C. Practice Makes Perfect

2. 16% of what
number is 2?

$$\frac{\textit{part}}{\textit{whole}} = \frac{p}{100} \quad \dots \textit{of whole.}$$

C. Practice Makes Perfect

3. What percent of
70 is 350?

$$\frac{\textit{part}}{\textit{whole}} = \frac{p}{100} \quad \dots \textit{of whole.}$$

C. Practice Makes Perfect

4. A baseball pitcher won 85% of the games he pitched. If he pitched 35 games, how many did he win?

$$\frac{\textit{part}}{\textit{whole}} = \frac{p}{100} \quad \dots \textit{of whole.}$$

Assignment: p. 142 #31-37

Solve.

31. What is 9% of 56?

32. What percent of 36 is 96?

33. What is 95% of 150?

34. What is 175% of 64?

35. What percent of 30 is 400?

36. 60 is 250% of what number?

37. Geography Water covers approximately 11,800 mi² of Florida, which is about 18% of Florida's area. What is the total area of Florida to the nearest thousand square miles?

