

Name _____

R 7-6

Finding a Percent of a Number

Suppose there were 240 secondary schools in Delaware County in 1996. If these schools were typical of U.S. schools, about how many would have had Internet access?

Percentage of U.S. Schools with Internet Access

| | 1994 | 1996 | 1998 |
|------------|------|------|------|
| Elementary | 30% | 61% | 88% |
| Secondary | 49% | 77% | 94% |

Find 77% of 240.

First estimate: 77% is close to 75%, and 75% is $\frac{3}{4}$. $\frac{3}{4} \times 240 = 180$

One Way

Write the percent as a decimal.

77% of 240

$$0.77 \times 240 = 184.8$$

So, about 185 schools had Internet access.

Another Way

Write a proportion.

$$\frac{\text{part}}{\text{whole}} = \frac{\text{percent value}}{100}$$

$$\frac{x}{240} = \frac{77}{100}$$

$$100x = 18,480$$

$$\frac{100x}{100} = \frac{18,480}{100}$$

$$x = 184.8$$

With a Calculator

Press: 0.77 \times 240 **ENTER**

Display: 184.8

OR

Press: 77 **%** \times

240 **ENTER**

Display: 184.8

40% of what number is 30?

1. Let x represent the unknown total or whole.

2. Write a proportion: $\frac{\text{percent value}}{100} = \frac{\text{known part}}{\text{unknown whole}}$, $\frac{40}{100} = \frac{30}{x}$

3. Find cross products: $40x = 3,000$

4. Divide to solve for x : $\frac{40x}{40} = \frac{3,000}{40}$; $x = 75$

Find the percent of each number.

1. 25% of 24 _____

2. 50% of 72 _____

3. 72% of 88 _____

Find the total amount.

4. 60% of _____ is 45

5. 25% of _____ is 22

6. 6% of _____ is 1.5

7. **Estimation** Is 49% of 32 greater than or less than 17?

PRACTICE

Name _____

Find the percent of each number.

1. 5% of 30

2. 80% of 80

3. 95% of 260

4. 20% of 90

5. 32% of 50

6. 2% of 350

7. 25% of 56

8. 3% of 600

9. 7% of 200

10. At a shelter, 15% of the dogs are puppies. There are 60 dogs at the shelter.
How many are puppies? _____ puppies
11. Terry has a box that originally held 64 crayons. She is missing 25% of the crayons.
How many crayons are missing? _____ crayons
12. In a survey, 230 people were asked their favorite color, and 20% of the people surveyed chose blue. How many people chose blue? _____ people
13. Leah is saving money to buy her sister a graduation gift. She needs \$44, and she has saved 25% of this amount so far. How much more money must Leah save? \$ _____