

## 7-5 Using Percent Equations

Fill in the table:

	Fraction	Percent	Decimal
①	$\frac{35}{100} = \frac{7}{20}$	35%	.35
②	$\frac{72}{100} = \frac{18}{25}$	72%	.72
③	$\frac{4}{15}$	26. $\bar{6}$ %	.2 $\bar{6}$

Ex. 1

Find 38% of 22.

$$.38 \cdot 22$$

$$8.36$$

Find 16% of 64

$$.16 \cdot 64 =$$

$$10.24$$

Ex. 2

19 is what percent of 25?

$$P \cdot \frac{25}{25} = \frac{19}{25} \quad P = \frac{19}{25} = .76$$
$$\boxed{76\%}$$

8 is what percent of 40?

$$P \cdot \frac{40}{40} = \frac{8}{40} \quad P = \frac{8}{40} = .20$$
$$20\%$$

Ex. 3 84 is 16% of what number?

$$\frac{84}{.16} = \frac{\cancel{.16} \cdot x}{\cancel{.16}} \quad x = 525$$

16 is 25% of what number?

$$\frac{16}{.25} = \frac{.25 \cdot x}{.25} \quad x = 64$$

Ex. 4 Stan wants to buy a cell phone that costs \$180. If 7% sales tax is added, what is the total cost?

what is 7% of 180?

$$.07 \cdot 180 = \$12.60$$

$$\$192.60$$

Tiffany is buying a T.V. that costs \$395. If 5% sales tax is added, what is the total cost?

$$0.05 \times 395 = 19.75$$

$$\$414.75$$

Ex. 5 Mr. Ebert bought a DVD player for \$97.19 including tax. The sticker price was \$89.99. What percent sales tax did he pay?

$$97.19 - 89.99 = \$7.20$$

7.20 is what percent of 89.99?

$$\frac{7.20}{89.99} = x \cdot 89.99 \quad x = 0.08 = 8\%$$

Mrs. Lee bought a blender for \$47.70 including tax. The original price of the mixer was \$45. What percent sales tax did she pay?

$$\frac{2.70}{45} = P \cdot \frac{45}{45} \quad P = 0.06 = 6\%$$

Homework

p.360 #1-8