

8th Grade Lesson 68

- I can solve percent word problems.
- I can visualize percents less than 100.

A percent of a number is another number.

$$\begin{array}{ccc} P \cdot A = B & & \\ \swarrow & & \searrow \\ F \cdot A = B & & D \cdot A = B \end{array}$$

You need to change the percent into either a decimal or a fraction before multiplying.

Sales tax is 5% in Maryland. Joey bought a pair of basketball shoes advertised for \$92.00. How much sales tax did he pay?

$$P \cdot A = B$$

↑
original
number

$$D \cdot A = B$$

$$0.05 \cdot \$92 = B$$

$$\$4.60 = B$$

tax was \$4.60

The big baby weighed 15 lb. Momma weighed him a week later and he weighed 18 lb! Momma could not believe it! She wondered, "What percent increase is this?"

$$D \cdot A = B$$

$$\frac{D \cdot 15}{15} = \frac{3}{15}$$

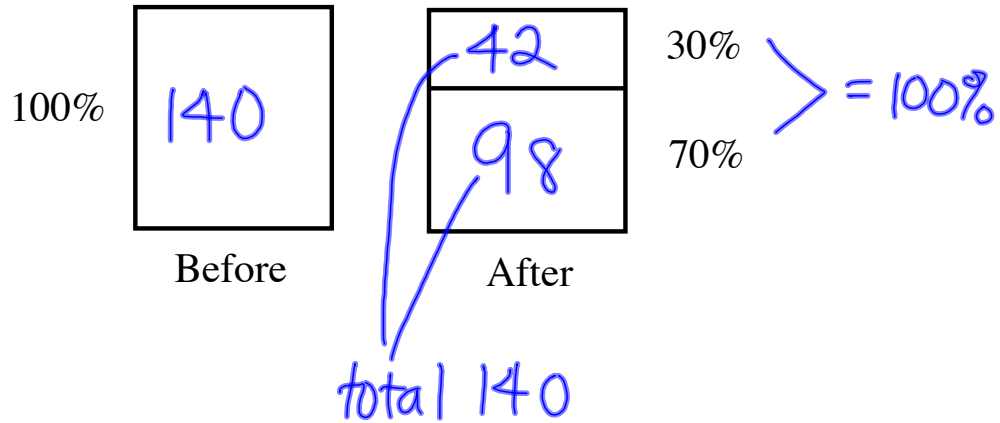
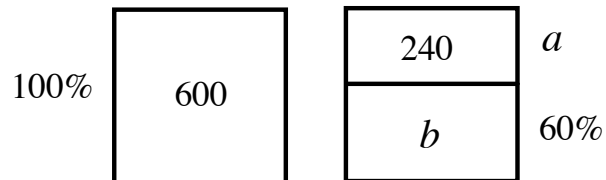
$$D = 0.2$$

$$P = 0.2 \cdot 100 = 20\%$$

20% increase

Visualizing percents

30 percent of 140 is 42

Complete the percent diagram by finding a and b .

$$\begin{array}{r} a + 60\% = 100\% \\ - 60\% \quad - 60\% \\ \hline a = 40\% \end{array}$$

$$\begin{array}{r} b + 240 = 600 \\ - 240 \quad - 240 \\ \hline b = 360 \end{array}$$

Evan was a smart shopper. He purchased a great kilt for \$433.65. It was 30% off the original price. What was the original price?

100% Original price

<u> </u>	30%
433.65	70%

$P \cdot A = B$
 $D \cdot A = B$

\$619.50

$$\frac{0.7 \cdot A}{0.7} = \frac{433.65}{0.7}$$

$$A = 619.50$$

Assignment

Problem Set 68 #1, 2, 7-9, 13-15, 19-25;

Test #16 on ~~Wednesday~~

Thursday

