

Do NowWrite the following percents as decimals.

1)  $19\% = \underline{0.19}$

2)  $2\% = \underline{0.02}$

3)  $7.5\% = \underline{0.075}$

Write the following decimals as percents.

4)  $0.89 = \underline{89\%}$

5)  $0.2 = \underline{20\%}$

6)  $0.015 = \underline{1.5\%}$

Practice with Percents

<u>The Percent Proportion</u>	<u>The Percent Equation</u>
$\frac{\text{part}}{\text{whole}} = \frac{\%}{100}$	Part = whole ( $\%$ ) Percent must be decimal

Use the percent equation to answer the following.

1) 24 is what percent of 60?

$$P: 24 \quad \frac{24}{60} = \frac{\%}{60}$$

$$w: 60 \quad \frac{24}{60} = \frac{\%}{60}$$

$$\% : \% \quad X = 0.40 \rightarrow 40\%$$

2) 8 is 40% of what number?

$$P: 8 \quad 8 = X(.40)$$

$$w: X \quad \frac{8}{.40} = \frac{\%}{.40}$$

$$\% : \% \quad X = 20$$

3) What number is 70% of 120?

$$P: X \quad X = 120(.70)$$

$$w: 120 \quad X = 84$$

$$\% : 70$$

4) 30 is what percent of 120?

$$P: 30 \quad \frac{30}{120} = \frac{\%}{120}$$

$$w: 120 \quad \frac{30}{120} = \frac{\%}{120}$$

$$\% : \% \quad X = 0.25 \rightarrow 25\%$$

5) 112 is 56% of what number?

$$P: 112 \quad \frac{112}{.56} = \frac{\%}{.56}$$

$$w: X \quad \frac{112}{.56} = \frac{\%}{.56}$$

$$\% : \% \quad X = 200$$

6) 128 is what percent of 80?

$$P: 128 \quad \frac{128}{80} = \frac{\%}{80}$$

$$w: 80 \quad \frac{128}{80} = \frac{\%}{80}$$

$$\% : \% \quad X = 1.5 \rightarrow 150\%$$

9) There are 35 competitors in a marathon. Sixty percent of these finished the race in under 4 hours. How many finished the race in under 4 hours?

$$\begin{array}{l}
 P: X \quad X = 35(.60) \\
 W: 35 \quad \textcircled{X = 21} \\
 \%: 60
 \end{array}$$

10) Your class is going on a field trip. Twenty-four students have turned in their permission slips so far. This is 80% of the students in the class. How many students are in the class?

$$\begin{array}{l}
 P: 24 \quad \frac{24}{.8} = \frac{X(.8)}{.8} \\
 W: X \\
 \%: 80 \quad \textcircled{X = 30}
 \end{array}$$

11) You take a test with 32 questions on it. You answer 24 questions correctly.

Part A) What percent of questions did you answer correctly?

$$\begin{array}{l}
 P: 24 \quad \frac{24}{32} = \frac{X}{32} \\
 W: 32 \\
 \%: X \quad X = 0.75 \rightarrow \textcircled{75\%}
 \end{array}$$

Part B) What percent of questions did you answer incorrectly?

$$100\% - 75\% = \textcircled{25\%}$$

12) A water tank has a capacity of 550 gallons. There is currently 363 gallons in the tank. What percent of the water tank is full?

$$\begin{array}{l}
 P: 363 \quad \frac{363}{550} = \frac{X}{550} \\
 W: 550 \\
 \%: X \quad X = 0.66 \rightarrow \textcircled{66\%}
 \end{array}$$