

## Problem 2 Calorie Count



A person on a 2000-calorie-per-day diet consumes 800 calories of fat. What percent of this diet comes from fat? You can use a proportion or a percent equation to determine the percent.

### Use a Proportion

**Step 1:** Set up a proportion.

$$\frac{f}{100} = \frac{800}{2000}$$

**Step 2:** Rewrite the proportion to isolate the variable.

$$f = \frac{(800)(100)}{2000}$$

**Step 3:** Perform the operation(s) to determine the value of  $f$ .

$$f = 40$$

### Use a Percent Equation

**Step 1:** Set up the percent equation.

$$\begin{aligned} f \times 2000 &= 800 \\ 2000f &= 800 \end{aligned}$$

**Step 2:** Rewrite the equation to isolate the variable.

$$\begin{aligned} \frac{2000f}{2000} &= \frac{800}{2000} \\ f &= \frac{800}{2000} \end{aligned}$$

**Step 3:** Perform the operation(s) to determine the value of  $f$ .

$$f = 0.4$$

Fat makes up 40 percent of the person's 2000-calorie-per-day diet.