

Possible Solutions

The coaches at Lakeside Middle School took a survey of 200 6th graders' favorite sports. The table below shows the results of the survey.

Sport	Number of Students	% of Students	Decimal Representation	Fractional Representation
Football	100	50 %	0.5	$\frac{1}{2}$
Basketball	40	20 %	0.2	$\frac{2}{10}$
Soccer	60			

Complete the equivalent forms for the amount of students who chose soccer.

- To solve this problem, first start with the part of the whole who chose soccer, which is 60 out of 200, or $\frac{60}{200}$.
- Divide both the numerator and denominator by 2 because percents are based out of 100. This becomes $\frac{30}{100}$.
- Using the new fraction, find the percent of students which is the numerator as a percent, which is 30%.
- Then, move the decimal two places to the left from above, and create a decimal to represent this amount, which is 0.3.
- Finally, determine the lowest fractional representation of this amount. In this case, look back at the original fraction from the first step and determine the reduced fraction. 30 and 100 can both be divided by 10 which becomes $\frac{3}{10}$, which is the lowest term for this fraction.