Solving Proportions – Identify Proportions in Percent Word Problems

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\frac{\text{Part}}{\text{Whole}} = \frac{x}{100}
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1. Thirty children from sixth grade math classes went to watch the Special Olympics at Medway High School. This is 20% of the total sixth graders. How many students are in the sixth grade?

2. Marvin surveyed his classmates to find out their favorite sports. Each classmate chose only one sport. The results of his survey are represented in the circle graph below.

In all, Marvin surveyed 48 of his classmates. An equal number of Marvin’s classmates chose baseball and football. Based on the circle graph, what is the total number of classmates who chose baseball as their favorite sport?
3. Marissa made the circle graph below to show how she spends her exercise time each week.

Marissa spent a total of 240 minutes exercising last week. How many minutes did she spend walking?

4. Dinner for two friends costs $24.32. The pair wants to leave a 15% tip. How much should they leave for a tip?
5. The circle graph below reflects students’ favorite ice cream flavors in Mrs. Farrell’s advisory.

If 4 students in Mrs. Farrell’s advisory said strawberry is their favorite flavor of ice cream, how many students are in Mrs. Farrell’s advisory?

6. Your class collected returnable bottles to raise money for the library. Your goal was to collect 80 bottles. You collected 56 bottles. What percent of your goal did you reach?
Challenge Questions:

7. In 2017, U.S. advertisers spent $180 billion, 6.6% of which was on radio. How much was spent on radio advertising?

8. Six million high school students in the United States play a scholastic sport. Only 92,000 college students receive sports scholarships. Estimate what percent of high school athletes receive scholarships to play college sports?