

Time for Hoops

Finding Percents of Numbers

Trish plays basketball in her town's basketball league. She learned that percents play a big part in understanding the game. Solve the following problems.



1 This year, Trish played in all of her team's games. The number of games Trish played in relation to the number of games the team played can be expressed as what percent?

Last year, Trish injured her ankle and missed 25% of her team's games. If the team played 28 games, how many games did Trish miss because of her injury?

2 Trish's team, the Hornets, played 24 games this season and won 62.5% of them. How many games did the Hornets win?

The first-place team, the Vipers, won 75% of the 24 games they played. How many games did the Vipers win?

3 Last season, Trish scored 70 points. This year she scored 160% more. How many points did Trish score this season?

4 Trish attempted 32 free throws and made 75% of them. How many free throws did she make?

The team attempted a total of 280 free throws and made 72.5% of them. How many free throws did the team make?

5 375 people attended the championship game between the Hornets and the Vipers. 48% of those attending the game bought advance tickets. How many people bought advance tickets?

6 During the season, Trish attempted 110 field goals and made 40% of them. How many field goals did Trish make?

Her teammate Ellen attempted 120 field goals and made 37.5% of them. How many field goals did Ellen make?

Sienna attempted 40 field goals and made 50% of them. How many field goals did Sienna make?

In your opinion, which girl is the best scorer? Explain.

The Class Picnic

**Finding Percents
of Numbers**

Luis volunteered to work with his class Picnic Committee. Solve the following percent problems related to the picnic.

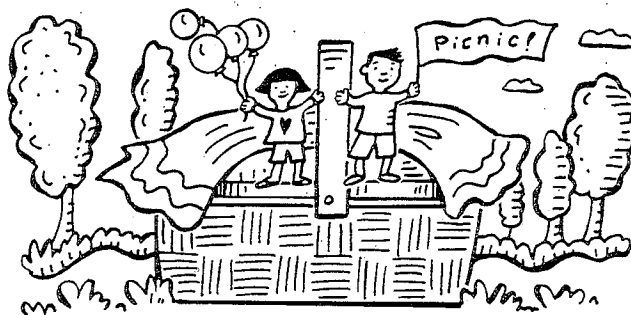
1 Based on the attendance at past picnics, Luis expects 95% of the students in his class to attend this year's picnic. If 120 students are in the class, how many students are likely to attend the picnic?

2 When polled to find out if they preferred hamburgers or hot dogs, all 120 students in the class responded. Sixty-five percent said they preferred hamburgers, while the rest preferred hot dogs. The Picnic Committee decided to order 2 hamburgers or 2 hot dogs for each student, based on the students' choices. How many hamburgers were ordered?

How many hot dogs were ordered? _____

3 When asked if they preferred cake or ice cream for dessert, all 120 students answered. Only 25% said they preferred cake, while the rest preferred ice cream. How many students preferred cake?

Those who preferred ice cream were given a choice of vanilla or chocolate. Sixty percent preferred chocolate, 10% had no preference, and the rest preferred vanilla. How many preferred chocolate?



How many preferred vanilla? _____

How many had no preference? _____

4 When asked if they preferred fruit juice or spring water, all 120 students answered. Fifty-five percent preferred juice, and 45% preferred spring water. The committee decided to order the equivalent of 3 cups of juice for each student who preferred juice. How many gallons of juice should the committee order? (16 cups equal 1 gallon.)

The committee decided to order 2 bottles of spring water for each student who preferred water. How many bottles should they order?

5 After the picnic, Luis conducted a poll to find out how many students enjoyed the picnic. Of the 104 students who responded, 25% rated it excellent, 60% rated it good, 15% rated it fair, and 4% rated it poor. Luis was pleased with these results, but his teacher said that the numbers could not be correct. Why not? Explain your answer on the back of this page.