

1. April wants to paint three walls of her bedroom. The walls are each 90 square feet. Paint is only sold in whole quarts, and each quart of paint will cover 100 square feet. How many quarts of paint must she purchase to have sufficient paint for this job?

1. \_\_\_\_\_ quarts

2. Joann rode her bike at an average speed of 12 miles per hour for three and a half hours. If her friend, Fran, rides for 3 hours, at what average speed, in miles per hour, would she have to ride her bike to travel the same distance that Joann traveled?

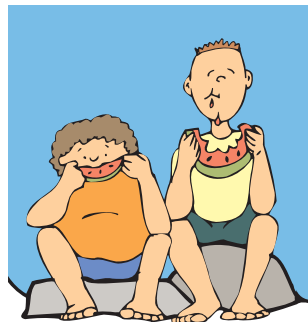


2. \_\_\_\_\_ mph

3. Jasmine is sitting in a small auditorium that has the same number of seats in each row. Jasmine is sitting in the 4th row from the front of the auditorium, which is also the 16th row from the back of the auditorium. She is sitting in the 7th seat from the left side, which is also the 25th seat from the right side. How many seats are in the auditorium?

3. \_\_\_\_\_ seats

4. Carlos is seven years older than his brother Jose. In two years, Carlos will be twice as old as Jose will be then. How old is Jose now?



4. \_\_\_\_\_ years old

5. A regular hexagon is inscribed in a circle of radius 2 units. In square units, what is the area of the hexagon? Express your answer in simplest radical form.

5. \_\_\_\_\_ sq units

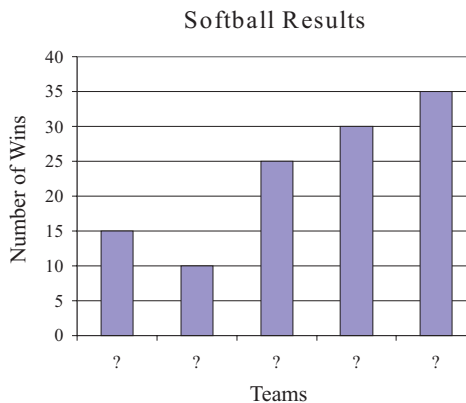
6. The number of games won by five softball teams are displayed in the graph. However, the names of the teams are missing. The following clues provide information about the teams:

6. \_\_\_\_\_ games

1. The Tigers won more games than the Eagles.

2. The Patriots won more games than the Cubs, but fewer games than the Mounties.

3. The Cubs won more than 20 games.

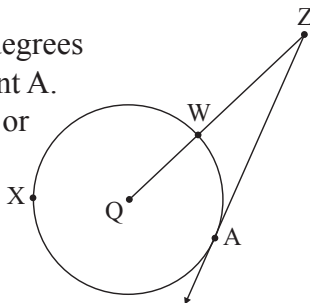


How many games did the Patriots win?

7. Let  $r = 3^s - s$  and  $s = 2^n + 1$ . What is the value of  $r$  when  $n = 2$ ?

7. \_\_\_\_\_

8. In the figure, angle QZA measures 20 degrees and ray ZA is tangent to circle Q at point A. What is the measure, in degrees, of major arc AXW?



8. \_\_\_\_\_ degrees

9. In a certain algebra classroom, if three round tables were removed and replaced by three square tables, the ratio of round tables to square tables would be 1:1. If instead three square tables were removed and replaced by three round tables, the ratio of round tables to square tables would be 13:7. How many square tables are in the algebra classroom?

9. \_\_\_\_\_ square tables

10. Set S is the set of all positive four-digit integers that have four distinct digits. How many of the integers in the set have a value less than 1235?

10. \_\_\_\_\_ integers