# Problem of the Week
Problem B and Solution
Creating Problems

Problem

Here are some answers...now exercise your math imagination to invent some word problems. Try to use more than one operation in some of your problems.

a) Create a problem that yields an answer of $3.45.

b) Create a problem for which the solution is 45 degrees.

c) Create a problem for which the solution is 17.3 metres.

d) Create a problem that yields an answer of $\frac{2}{5}$.
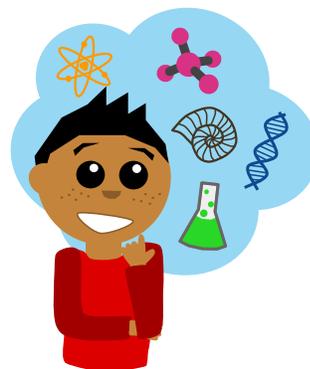
Solution

Answers will vary widely. Here are some samples for each situation.

a) Pat sold 13 cups of lemonade at $0.25 each. She also got 20 cents in tips. How much did she make? ($13 \times \$0.25 = \$3.25$, plus 20 cents gives $3.45)

b) A circular pizza is cut along four diameters to yield 8 pieces of equal size. What is the measure of the angle at the vertex of each piece? ($\frac{1}{8}$ of $360°$ equals $45°$)

Ali folded a square sheet of paper in half along a diagonal. What is the measure of the angle at the corner with the fold? ($\frac{1}{2}$ of $90°$ equals $45°$)

c) The fence around a field in the shape of a quadrilateral is 80 metres long. Three of the sides are 20, 15.8 and 26.9 metres in length. What is the length of the fourth side? ($20 + 15.8 + 26.9 +$ unknown side length $= 80$m, so the unknown side length is $80 - 62.7 = 17.3$ m.)

Five students compete in long jump, with jumps of 3.5 m, 3.3 m, 3.1 m, 4.1 m and 3.3 m. What is the total of the distances jumped? (Sum $= 17.3$ m.)

d) Mark has a circular spinner divided into equal segments coloured red, brown, black, green, and orange. What is the probability that Mark will land on a colour which starts with b? (Two of the five segment colours start with b, so the probability is $\frac{2}{5}$.)