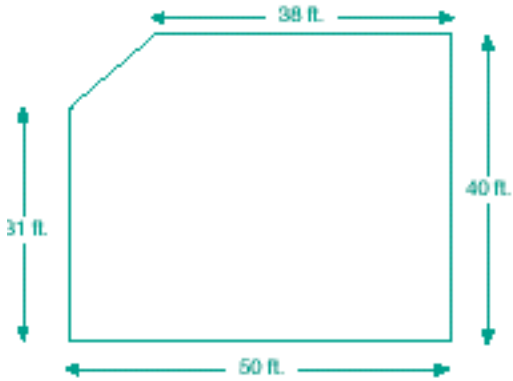


BRAIN BUSTER CHALLENGE

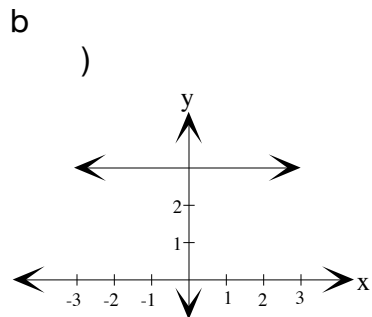
Mathematics

Place your team's answers in the boxes at the right.
Each answer is worth 10 points.

1. The diagram below shows the overall floor plan for a house. It has right angles at three corners. What is the perimeter of the house?



2. Write an equation for this line:



3. Solve the following equation by factoring.

a)

$$x^2 + 5x - 24 = 0$$

4. A woman collects antique music boxes. She bought two, but found herself short of money and had to sell them quickly. She sold them for \$600 each. On one she made 20 percent and on the other she lost 20 percent. Did she make or lose money on the whole deal? And how much?

5. A whole number between 1 and 30 is chosen at random. If the digits of the number that is chosen add up to 9, what is the probability that the number is greater than 15?

6. If one person can split a chord of wood in 4 days, and another can do it in 3 days, how long will it take them if they work together?

7. What is the missing number in the following sequence?

3 7 15 ___ 63 127