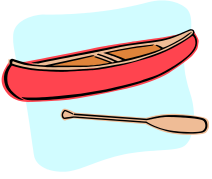


Word Problems 2 - for every problem you need to define a variable, write an equation that represents the problem, and then solve the equation to answer the question.

1. Beneath Earth's surface, the temperature increases 10 degrees Celsius every kilometer. Suppose that the surface temperature is 22 degrees Celsius, and the temperature at the bottom of a gold mine is 45 degrees Celsius. What is the depth of the gold mine?
2. One health insurance policy pays people for claims by multiplying the claim amount by .8 and then subtracting \$500. If a person receives a check for \$4650, how much was the claim amount?
3. You are fencing a rectangular puppy kennel with 25 feet of fence. The side of the kennel against your house does not need a fence. This side is 9 feet long. Find the dimensions of the kennel.
4. The Nelson's rented a moving truck for \$49.95 plus \$0.30 per mile. Before returning the truck, they filled the tank with gasoline, which cost \$18.32. The total cost was \$95.87. Find the number of miles the truck was driven.

5. John and two friends rent a canoe at Lacamas Lake. Each person must rent a life jacket. If the bill for the rental of the canoe and life jackets is \$41, for how many hours did they rent the canoe?



Canoe Rental

\$5.00 per hour
\$2.00 life jacket

6. A hairdresser is considering ordering a certain shampoo. Company A charges \$4 per 8-oz bottle plus a \$10 handling fee per order. Company B charges \$3 per 8-oz bottle plus a \$25 handling fee per order. How many bottles must the hair dresser buy to justify using company B?
7. One health club charges a \$44 sign-up fee and \$30 per month. Another health club charges a \$99 sign-up fee and \$25 per month. How many months would you have to be a member at each club before the cost was the same?