

Name: _____ **Date:** _____

1. Frank, the vet tech is going to clean up a spill and mixes a 1:10 solution of bleach and water. Frank first mixes $1\frac{1}{4}$ cups of bleach to $8\frac{1}{2}$ cups of water and realizes he does not have enough. He then adds $2\frac{3}{4}$ cups of bleach and $9\frac{2}{3}$ cups of water to the solution. How much solution does Frank have? Is it the correct ratio?

2. The manual for the tropical fish states that each fish needs 1.5 gallons of water for each inch of fish. You have three fish that measure 10.8 cm, 15.3 cm and 14 cm. How many gallons of water do you need in the fish tank?

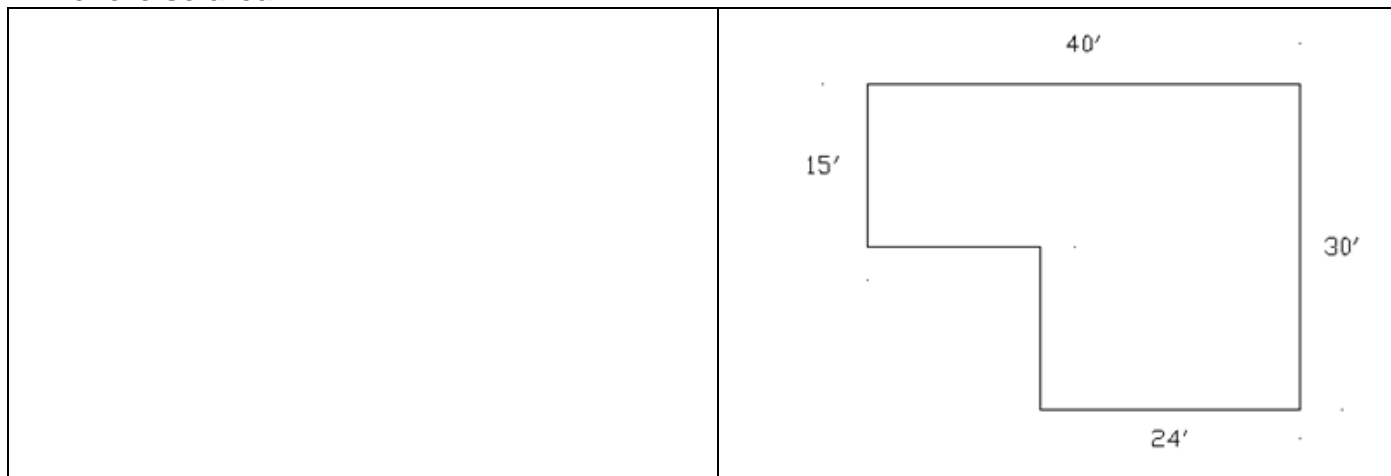
[illegible]

- 3. Measure the line in inches and centimeters using a scale. Convert inches to centimeters to show that your answer is correct.**

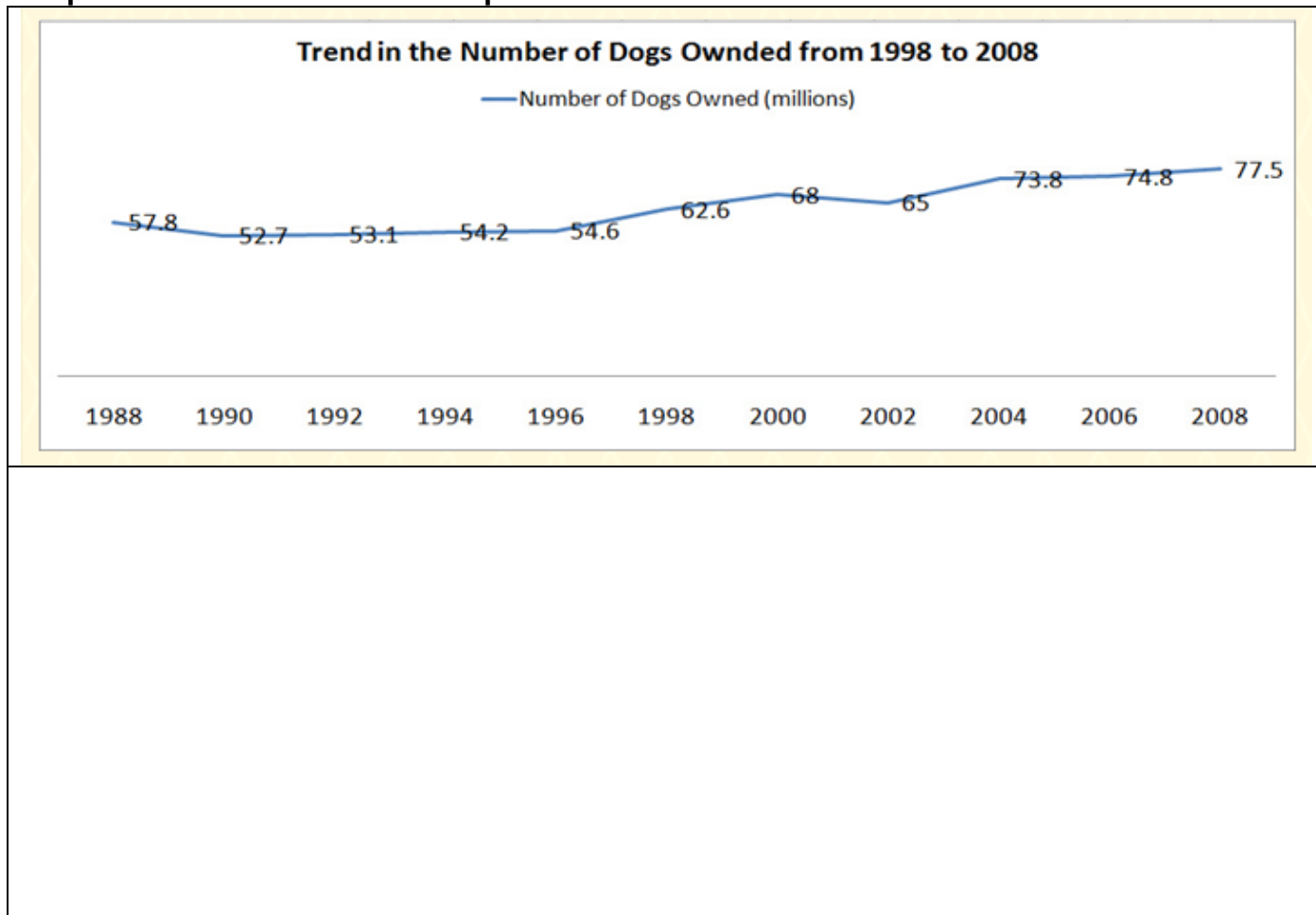


Use 2.54 cm = 1 inch to check your measurement.

4. Compute the area in square feet and the perimeter in feet of the fenced area below. Our old exercise area was 500 square feet. What is the percent increase in the exercise area?



5. The following graphⁱ shows the number of dogs owned from 1988 to 2008 in the United States. What percent increase in dog ownership from 1988 to 1998? What percent increase in ownership from 1988 to 2008?

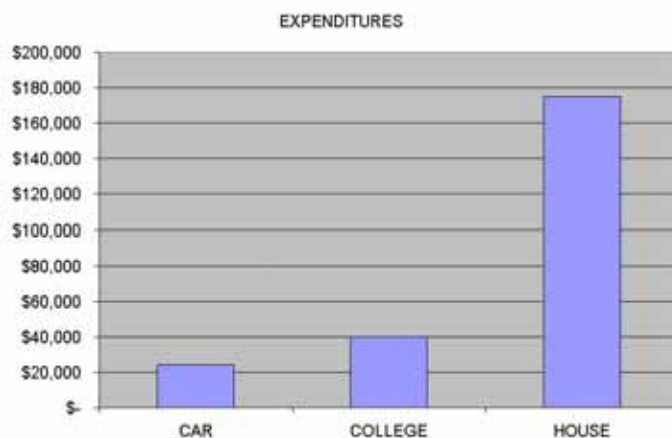


6. Jordan, the Vet Tech is going to clean the kennel and mixes a solution containing 10% bleach and 90% water. Filling a 2.5 gallon bucket, how much water and how much bleach should Jordan add to make 2.5 gallons of solution?

7. We are mixing a chemical compound with component A (7.5 parts) to a component B (2.5 parts). We have 15.5 kg of component A. How much component B do we need?

8. We have a 3-liter container of hydrogen peroxide and we use 250 ml of the chemical everyday. If we open the container on Monday August 3, what day in that month will we open the next container?

9. From observing the graph, estimate the expenditures for a car, college and a house.



10. If there are 2 ounces of soap to 8 cups of water, how many cups of water is used with 106 ounces of soap?

11. In 2008, dog owners spent an average of \$229 on food and \$64 on food treats. There is an estimated 45.6 million dog owners in the United States. How much money is spent on dog treats? How much money is spent on dog food?

ⁱ Trend in the Number of Dogs Owned in U.S., Three Dog Bakery, 2009, August 5, 2009, <http://www.threedogfranchise.com/WhyThreeDogBakery/Category-Data>