1. The scale for a drawing of a barn is http://java.glencoe.com/servlets/mathml4.MathGifPtTest2?mml=%3Cmath%3E%3Csemantics%3E%3Cmrow%3E%3Cmfrac%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fsemantics%3E%3C%2Fmath%3Einch = 4 feet. If a pole in the drawing measures http://java.glencoe.com/servlets/mathml4.MathGifPtTest2?mml=%3Cmath%3E%3Csemantics%3E%3Cmrow%3E%3Cmn%3E2%3C%2Fmn%3E%3Cmfrac%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fsemantics%3E%3C%2Fmath%3Einches, how tall is the actual pole?

2. Mike has an assignment to construct a scale drawing of an outdoor chair. He plans to use the scale 1 inch = 4 inches. If the height of the chair is 16 inches, how tall should it be in the drawing?

3. A Titan rocket is 80 feet high. For his science project, Joe will build a scale model of the rocket. How tall will his model be if he uses the scale 1 inch = 5 feet?

4. Alan made a scale drawing of his bedroom. In the drawing, 2 cm represent 7 m. If the windows in the drawing are http://java.glencoe.com/servlets/mathml4.MathGifPtTest2?mml=%3Cmath%3E%3Cmrow%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmfrac%3E%3Cmrow%3E%3Cmn%3E11%3C%2Fmn%3E%3C%2Fmrow%3E%3Cmrow%3E%3Cmn%3E14%3C%2Fmn%3E%3C%2Fmrow%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3Ecm apart, how many meters apart are the actual windows?

5. The scale of Miguel's dollhouse is 1 in. = http://java.glencoe.com/servlets/mathml4.MathGifPtTest2?mml=%3Cmath%3E%3Cmrow%3E%3Cmn%3E2%3C%2Fmn%3E%3Cmfrac%3E%3Cmn%3E2%3C%2Fmn%3E%3Cmn%3E7%3C%2Fmn%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3Eft. If the pants of the military uniform of the father in the dollhouse are http://java.glencoe.com/servlets/mathml4.MathGifPtTest2?mml=%3Cmath%3E%3Cmrow%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmfrac%3E%3Cmn%3E2%3C%2Fmn%3E%3Cmn%3E5%3C%2Fmn%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3Einches long, how long would the pants be in real life?

6. Abigail redecorates her house. A scale drawing of her house shows the dimensions of the house as 9 cm by 10 cm. If 6 cm on the scale drawing equals 12 ft, what are the actual dimensions of Abigail’s house?

7. Max makes a scale drawing of distance between Salt Lake City and Arizona. The distance between Salt Lake City and Arizona is 21 cm. If each 7cm on the scale drawing equals 250 kilometers, how far apart are the Salt Lake City and Arizona?

8. In the morning, Sophie goes to the church then goes to the school. In the afternoon she goes to school to home. The map shows the distance between school and home as 5 cm. If every 4 cm on the scale drawing equals 8 kilometers, how far apart are the school and home?

9. Andrew draws a scale drawing of his office. On the drawing, his office is 6 cm by 7 cm. If the scale of the drawing is 5 cm = 10 ft, what are the actual dimensions of Andrew’s office?

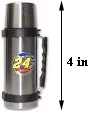
10. Anna is a sales person who has jobs this week in cities within North Carolina and South Carolina. On a map, these two cities are 50 centimeters apart. The map uses a scale of 2 centimeters = 4 kilometers. What is the actual distance between these cities?

11. A particular map shows a scale of 1 cm : 5 km.  What would the map distance (in cm) be if the actual distance is 14 km?

12. A scale drawing of a basketball court has a scale of 1 inch : 9 feet. The basketball court is 94 feet by 50 feet. Find the dimensions of the court in the drawing.

13. A scale drawing of a basketball court has a scale of 1 inch : 9 feet. The free throw line is 15 feet from the backboard. How far is the free throw line from the backboard in the drawing?

14. At the right is a scale drawing of a carpenter ant. The scale of the drawing is 1 cm : 2.5 mm. Find the actual length of the ant’s head, thorax, and abdomen. Round your answers to the nearest hundredth of a millimeter.

15. The scale of the picture is ½ in. : 3 cm. Find the actual length of the coffee mug.

16. Merritt is driving to Mount Shasta. On her map, it is 7 ¾ miles away. The scale of her map is ½ in = 50 miles. How many more miles does Merritt have to drive?

17. Chad built a scale model of a statue. He built the model 7 inches tall to represent the actual height of 15 feet. What equation would represent the relationship between the actual height (x), in feet, and the height of the model (y), in inches?