Review & Preview

5-34. DeShawna and her team gathered data for their ball and recorded it in the table shown at right.

a. What is the rebound ratio for their ball?

Drop Height	Rebound Height
150 cm	124 cm
70 cm	59 cm
120 cm	100 cm
100 cm	83 cm
110 cm	92 cm
40 cm	33 cm

b. Predict how high DeShawna's ball will rebound if it is dropped from 275 cm. Look at the precision of DeShawna's measurements in the table. Round your calculation to a reasonable number of decimal places.

c. Suppose the ball is dropped and you notice that its rebound height is 60 cm. From what height was the ball dropped? Use an appropriate precision for your answer.

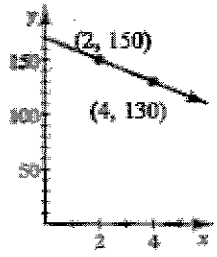
5-46. Allie is making 8-dozen chocolate-chip muffins for the Food Fair at school. The recipe she is using makes 3-dozen muffins. If the original recipe calls for 16 ounces of chocolate chips, how many ounces of chocolate chips does she need for her new amount? (Allie buys her chocolate chips in bulk and can measure them to the nearest ounce.)

5-52. A tank contains 8000 liters of water. Each day, half of the water in the tank is removed. How much water will be in the tank at the end of:

a. The 4^{th} day?

b. The 8^{th} day?

5-54. Draw a slope triangle and use it to find the equation of the line shown in the graph below.



7-14. Sketch the shape of the graph of the function $y = b^x$ given each of the following values of b.

a. b is a number larger than 1.
b. b is a number between 0 and 1.
c. b is equal to 1.