Math 20-2   **Name:**_____
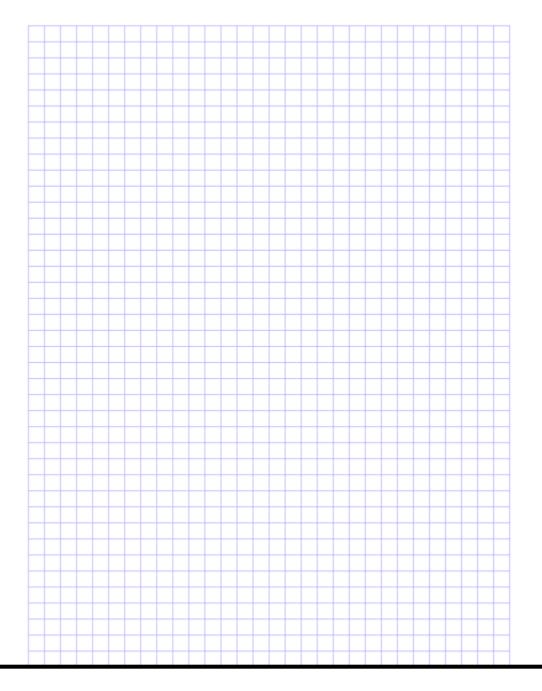
Scale Drawings Skills

1. Use scales to solve problems:

   100 cm = 1 m

   10 mm = 1 cm

   a) A builder plans to draw a set of house plans using the scale 1:200.

       i.   The north side of the house is 17.0 m wide. How many cm will this equal on the scale diagram?

       ii.   On the builder's plans, the west side of the house is 12.0 cm long. What is the real length for the west side of this house?

   b) The real width of an animal cell is 0.15 mm. The width of this animal cell in a diagram is 6.0 cm. What is the scale factor for this diagram?

2. Each square on the grid represents 2.0 feet. There are more squares than you need for this question. Make sure your property starts at the street.
   i. Draw a property that is 50 feet wide and 70 feet deep.
   ii. The owner of the property wants to build a house that is 30 feet wide and 36 feet deep. Draw the house on the property so it is at least 8.0 feet from each side of the property and at least 16 feet from the street.
   iii. Draw a deck on the back of the house that has a total square footage of 48 ft^2.

Street