7.3 - W 4

Name: _____ Date: _____

Proportions and Scale Factors

1. Calculate the missing value in each proportion. (use algebra!)

a) $\frac{1}{8} = \frac{\square}{624}$

b) $\frac{1}{50} = \frac{25.2}{\square}$

c) $\frac{1}{0.6} = \frac{58}{\square}$

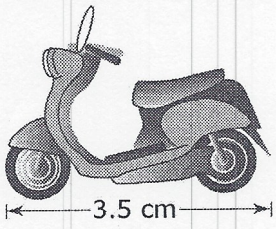
d) $\frac{1}{\square} = \frac{15.3}{1224}$

e) $\frac{1}{75} = \frac{\square}{6450}$

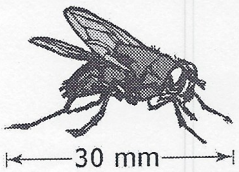
f) $\frac{1}{\square} = \frac{5.6}{1.68}$

2. Calculate the actual length of each object.

a) The scale for the image of the scooter is 1 : 20.



b) The scale for the enlarged image of a housefly is 1 : 0.3.



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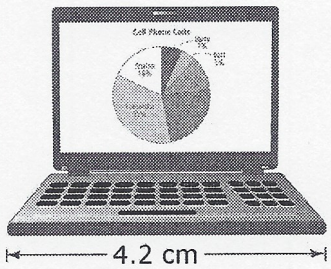
3. Determine the scale factor. (always smaller term on top!)

a) $\square = \frac{53}{106}$ **b)** $\square = \frac{0.9}{15}$ **c)** $\square = \frac{17}{850}$

d) $\square = \frac{6.2}{24.8}$ **e)** $\square = \frac{18}{24}$ **f)** $\square = \frac{30}{37.5}$

4. An actual laptop has a width of 39.5 cm.
Calculate the scale factor used in the image
of the laptop. Express the answer to the nearest tenth.



5. A driving distance is 650 km. The distance shown on a map is 4 cm.

a) Express the map scale in words.

b) What is the scale factor? Express the answer to the nearest tenth.