

Name _____

Date _____

Mr. Tallman

Homework #31 – Scale Drawings and Scale Factor

Use the word bank to answer questions 1-4

Word Bank			
Enlargement	Reduction	Scale Drawing	Scale Factor

- 1) Another name for the constant of proportionality when dealing with scale drawings is the _____.
- 2) A scale drawing that is *smaller* than the actual object is called a(n) _____.
- 3) A scale drawing that is *larger* than the actual object is called a(n) _____.
- 4) A drawing that is proportional to an original object and is either an enlargement or reduction of the original object is called a _____.

Identify the following diagrams as either an enlargement or reduction.

5) _____

Actual Picture

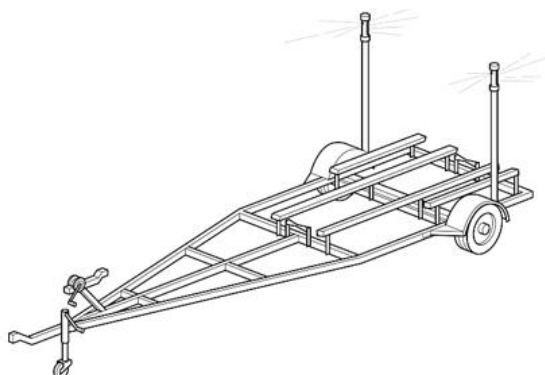


b. Scale Drawing

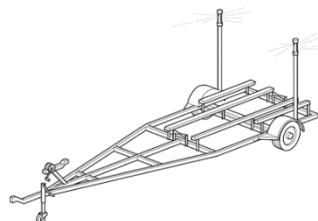


6) _____

Actual Picture

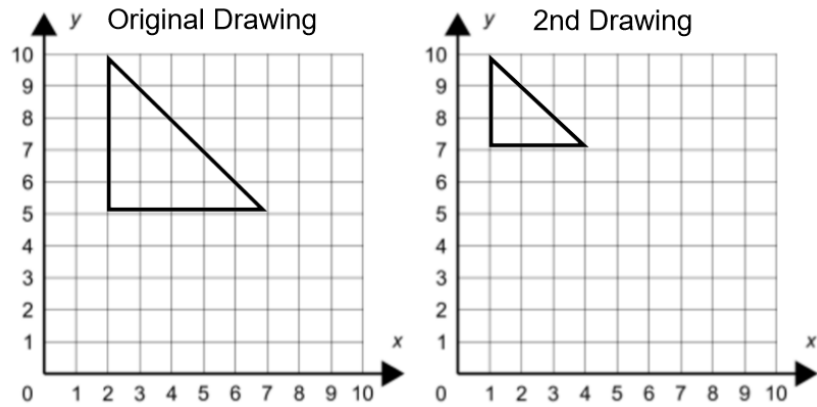


Scale Model



Use the following diagram to answer questions 7-9.

7) Is the second drawing a scale drawing of the first? Show all work.



8) What is the scale factor? _____

9) Is the second drawing an enlargement or a reduction of the original? Explain. Use the scale factor in your explanation.

Review

Solve the following proportions. Round to the nearest tenth if necessary.

1) $\frac{78}{36} = \frac{26}{a}$	2) $\frac{30}{b} = \frac{19.9}{51.6}$
3) The cost of 31 kg of tomatoes is \$155. How much would 2 kg cost?	4) A car travels 195 kilometers in 1.7 hours. If the speed of the boat is constant, how long would it take for the boat to travel 282 kilometers?