

Solutions to Homework

1) 90 cm by 60 cm

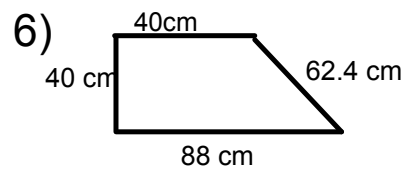
$$2) SF = \frac{2}{4}$$

$$= 0.5$$

3a) SF = 6.4

3b) Scale Length = 33.92 cm

4) SF = 0.5



7) Model Length = 26 cm

Solutions to Worksheet

$$8) \text{ Scale factor} = \frac{46\text{mm}}{12\text{mm}} = 5.5$$

$$9) \text{ Scale factor} = \frac{2000\text{cm}}{18\text{cm}} = 111.1$$

$$10) \text{ Scale factor} = \frac{9\text{cm}}{63\text{cm}} \\ = \frac{1}{7} \\ \text{or} \\ 0.14$$

$$11a) \text{ Scale factor} = \frac{18\text{cm}}{7200\text{cm}} \\ = 0.0025$$

$$b) \text{ Scale length} \\ = 6.2\text{m} \times 0.0025 \\ = 0.0155\text{m} \\ \text{or} \\ 1.55\text{cm}$$

$$12) \text{ Scale factor}_{\text{bottom}} = \frac{7}{2} \\ = 3.5$$

$$13a) \quad b$$

$$b) \quad 40\text{mm}$$

$$c) \quad 20.3\text{cm}$$

$$d) \quad 20.5$$

$$e) \quad 40.5\text{m}$$

$$f) \quad 3.7$$

$$g) \quad 60.1\text{mm}$$

$$h) = 0.5$$

$$\text{I) } 39.2\text{cm}$$

14. Use a scale factor of 3 to create the following diagram.

