

Liberal Arts Mathematics I
Dimensional Analysis Tables

Table 1

$$5280 \text{ ft} = 1 \text{ mi}$$

$$1720 \text{ yd} = 1 \text{ mi}$$

Table 2, lengths

$$1 \text{ in.} \approx 2.54 \text{ cm}$$

$$1 \text{ ft} \approx 30.48 \text{ cm}$$

$$1 \text{ yd} \approx 0.9 \text{ m}$$

$$1 \text{ mi} \approx 1.61 \text{ km}$$

Table 3, areas

$$1 \text{ ft}^2 = 144 \text{ in}^2$$

$$1 \text{ in}^2 \approx 6.5 \text{ cm}^2$$

$$1 \text{ yd}^2 = 9 \text{ ft}^2$$

$$1 \text{ ft}^2 \approx 0.09 \text{ m}^2$$

$$1 \text{ acre} = 43,560 \text{ ft}^2 \\ = 4840 \text{ yd}^2$$

$$1 \text{ yd}^2 \approx 0.8 \text{ m}^2$$

$$1 \text{ mi}^2 = 640 \text{ acres}$$

$$1 \text{ mi}^2 \approx 2.6 \text{ km}^2$$

Table 4, volume to capacity

$$1 \text{ yd}^3 \approx 200 \text{ gal}$$

$$1 \text{ cm}^3 = 1 \text{ ml}$$

$$1 \text{ ft}^3 \approx 7.48 \text{ gal}$$

$$1 \text{ dm}^3 = 1000 \text{ cm}^3$$

$$231 \text{ in}^3 \approx 1 \text{ gal}$$

$$1000 \text{ cm}^3 = 1000 \text{ ml}$$

$$1 \text{ m}^3 = 1 \text{ kl}$$

Table 5, volume to weight

$$1 \text{ cm}^3 = 1 \text{ ml} = 1 \text{ g}$$

$$1 \text{ oz} = 28 \text{ g}$$

$$1000 \text{ cm}^3 = 1 \text{ l} = 1 \text{ kg}$$

$$1 \text{ lb} = 0.45 \text{ kg}$$

$$1 \text{ m}^3 = 1 \text{ kl} = 1000 \text{ kg}$$