

Converting Square Units

- 1) Convert 8 square feet into square inches.

$$8 \text{ ft}^2 \times \frac{12^2 \text{ in}^2}{1^2 \text{ ft}^2}$$

$$8 \times 144 \text{ in}^2$$

$$\boxed{1152 \text{ in}^2}$$

- 3) Convert 3000 square inches into square yards.

$$3000 \text{ in}^2 \times \frac{1^2 \text{ yd}^2}{36^2 \text{ in}^2} \quad 1 \text{ yd} = 36 \text{ in}$$

$$\frac{3000}{36^2} = \frac{3000}{1296} = \boxed{2.31 \text{ yd}^2}$$

- 5) Convert 5 square metres into square centimetres.

$$5 \text{ m}^2 \times \frac{100^2 \text{ cm}^2}{1^2 \text{ m}^2}$$

$$5 \times 10000$$

$$\boxed{50000 \text{ cm}^2}$$

- 7) Convert 80 000 square metres into square kilometres.

$$80000 \text{ m}^2 \times \frac{1^2 \text{ km}^2}{1000^2 \text{ m}^2}$$

$$\frac{80000}{1000000} = \boxed{0.08 \text{ km}^2}$$

- 9) Convert 4 square feet into square metres.

$$4 \text{ ft}^2 \times \frac{1^2 \text{ yd}^2}{3^2 \text{ ft}^2} \times \frac{.9144^2 \text{ m}^2}{1^2 \text{ yd}^2}$$

$$\frac{4 \times .9144^2}{3^2} = \frac{3.34}{9} = \boxed{0.37 \text{ m}^2}$$

- 11) Convert 500 square centimetres into square inches.

$$500 \text{ cm}^2 \times \frac{1^2 \text{ in}^2}{2.54^2 \text{ cm}^2}$$

$$\frac{500}{6.4516} = \boxed{77.5 \text{ in}^2}$$

- 2) Convert 5 square yards into square feet.

$$5 \text{ yd}^2 \times \frac{3^2 \text{ ft}^2}{1^2 \text{ yd}^2}$$

$$5 \times 9$$

$$\boxed{45 \text{ ft}^2}$$

- 4) Convert 2 square miles into square yards.

$$2 \text{ mi}^2 \times \frac{1760^2 \text{ yd}^2}{1^2 \text{ mi}^2}$$

$$2 \times 3097600$$

$$\boxed{6195200 \text{ yd}^2}$$

- 6) Convert 680 square millimetres into square centimetres.

$$680 \text{ mm}^2 \times \frac{1^2 \text{ cm}^2}{10^2 \text{ mm}^2}$$

$$\frac{680}{10^2} = \frac{680}{100} = \boxed{6.8 \text{ cm}^2}$$

- 8) Convert 6 square kilometres into square centimetres.

$$6 \text{ km}^2 \times \frac{1000^2 \text{ m}^2}{1^2 \text{ km}^2} \times \frac{100^2 \text{ cm}^2}{1^2 \text{ m}^2}$$

$$6 \times 1000^2 \times 100^2$$

$$\boxed{6 \times 10^{10} \text{ cm}^2 \text{ or } 60000000000 \text{ cm}^2}$$

- 10) Convert 2.5 square miles into square kilometres.

$$2.5 \text{ mi}^2 \times \frac{1.609^2 \text{ km}^2}{1^2 \text{ mi}^2}$$

$$2.5 \times 2.589$$

$$\boxed{6.47 \text{ km}^2}$$

- 12) Convert 12.8 square metres into square yards.

$$12.8 \text{ m}^2 \times \frac{1^2 \text{ yd}^2}{.9144^2 \text{ m}^2}$$

$$\frac{12.8}{0.836} = \boxed{15.31 \text{ yd}^2}$$