

KEY

Imperial to Metric Conversions

1) Convert 7 inches into cm.

$$7 \text{ in} \times \frac{2.54 \text{ cm}}{1 \text{ in}} = \boxed{17.78 \text{ cm}}$$

2) Convert 14 feet into metres.

$$14 \text{ ft} \times \frac{.3048 \text{ m}}{1 \text{ ft}} = \boxed{4.27 \text{ m}}$$

3) Convert 6 yards into metres.

$$6 \text{ y} \times \frac{.9144 \text{ m}}{1 \text{ y}} = \boxed{5.49 \text{ m}}$$

4) Convert 8 miles into kilometres.

$$8 \text{ mi} \times \frac{1.609 \text{ km}}{1 \text{ mi}} = \boxed{12.87 \text{ km}}$$

5) Convert 9.2 miles into metres.

$$9.2 \text{ mi} \times \frac{1760 \text{ y}}{1 \text{ mi}} \times \frac{.9144 \text{ m}}{1 \text{ y}} = \boxed{14805.9 \text{ m}}$$

6) Convert 7000 yards into kilometres.

$$7000 \text{ y} \times \frac{1 \text{ mi}}{1760 \text{ y}} \times \frac{1.609 \text{ km}}{1 \text{ mi}} = \boxed{6.40 \text{ km}}$$

7) Convert 500 inches into metres.

$$500 \text{ in} \times \frac{1 \text{ y}}{36 \text{ in}} \times \frac{.9144 \text{ m}}{1 \text{ y}} = \boxed{12.7 \text{ m}}$$

8) Convert 75 feet into centimetres.

$$75 \text{ ft} \times \frac{30.48 \text{ cm}}{1 \text{ ft}} = \boxed{2286 \text{ cm}}$$

9) Convert 5 yards into millimetres.

$$5 \text{ y} \times \frac{91.44 \text{ cm}}{1 \text{ y}} \times 10 = \boxed{4572 \text{ mm}}$$

10) Convert 2 metres into feet.

$$2 \text{ m} \times \frac{1 \text{ ft}}{.3048 \text{ m}} = \boxed{6.46 \text{ ft}}$$

11) Convert 24 centimetres into inches.

$$24 \text{ cm} \times \frac{1 \text{ in}}{2.54 \text{ cm}} = \boxed{9.45 \text{ in}}$$

12) Convert 9 kilometres into miles.

$$9 \text{ km} \times \frac{1 \text{ mi}}{1.609 \text{ km}} = \boxed{5.6 \text{ mi}}$$

13) Convert 29 metres into yards.

$$29 \text{ m} \times \frac{1 \text{ y}}{.9144 \text{ m}} = \boxed{31.71 \text{ y}}$$

14) Convert 290 inches into metres.

$$290 \text{ in} \times \frac{1 \text{ y}}{36 \text{ in}} \times \frac{.9144 \text{ m}}{1 \text{ y}} = \boxed{7.37 \text{ m}}$$

15) Convert 75 metres into inches.

$$75 \text{ m} \times \frac{1 \text{ y}}{.9144 \text{ m}} \times \frac{36 \text{ in}}{1 \text{ y}} = \boxed{292.76 \text{ in}}$$

16) Convert 10.4 kilometres into feet.

$$10.4 \text{ km} \times \frac{1000 \text{ m}}{1 \text{ km}} \times \frac{1 \text{ ft}}{.3048 \text{ m}} = \boxed{34120.73 \text{ ft}}$$

- 17) Jimmy is driving 120km/h in the U.S. The speed limit is 70m/h. Is he speeding? How much above or below the limit is he?

$$120 \text{ km/h} \times \frac{1 \text{ m}}{1.609 \text{ km}} = 74.6 \text{ mph}$$

YES, 4.6 OVER

- 19) Billy needs 5 yards of fabric. He has 4.5 metres. Does he have enough? By how much?

$$5 \text{ y} \times \frac{.9144 \text{ m}}{1 \text{ y}} = 4.572 \text{ m}$$

NO, By .07m

- 21) Mark is buying some PVC pipe. It costs \$2.89 per foot. He needs 8 metres. How much will it cost?

$$8 \text{ m} \times \frac{1 \text{ y}}{.9144 \text{ m}} \times \frac{3 \text{ ft}}{1 \text{ y}}$$

= 26.25 ft

x 2.89

\$75.85

Does not say
"By the foot only"
whole
otherwise
\$78.03

- 18) Jenny is 5' tall. She needs to be at least 160cm tall to go on a ride. Is she tall enough? By how much?

$$160 \text{ cm} \times \frac{1 \text{ ft}}{30.48 \text{ cm}} = 5.25 \text{ ft}$$

NO, By .25ft (3 in)

- 20) A Canadian Football field is 110 yards long. Henry is training for the 100m sprint. Is a football field long enough? By how much?

$$110 \text{ y} \times \frac{.9144 \text{ m}}{1 \text{ y}} = 100.58 \text{ m}$$

YES, By 0.58m

- 22) Karen is buying wallpaper. It costs \$8.79 per metre. She needs 120 feet. How much will it cost?

$$120 \text{ ft} \times \frac{1 \text{ m}}{3.048 \text{ ft}}$$

= 39.37 m

x 8.79

\$3460.63

UNLESS it's by
the full meter,
in which case

\$3516.

But really, it's sold
by the roll...