Conversions Miscellaneous Worksheet Name KEY

1) A 800 meter race is how many feet? 1 meter = 3.28 feet

$$\frac{800\text{m} \mid 3.28\text{ft}}{\mid 1\text{meter}} = \boxed{2624 \text{ feet}}$$

2) A 10 kilometer race is how many miles? 1 mile= 1.6 km

$$\frac{10\text{ km} \mid 1\text{ mile}}{\mid 1.6\text{ km}} = \boxed{6.25 \text{ miles}}$$

3) A 40 acre parcel measures ¼ mile by ¼ mile square. If a rectangular lot measures 300 feet by 200 feet, how many acres is this? $300 \times 200 =$

$(5280 \text{ feet})^2 = (1 \text{ mile})^2$

$27{,}878{,}400 \text{ft}^2 = 1 \text{ mile}^2$

$$\frac{60{,}000\text{ft}^2 \mid 1\text{miles}^2 \mid 40\text{acre}}{\mid 27{,}878{,}400\text{ft}^2 \mid .0625\text{ mile}^2} = \frac{2{,}400{,}000}{1{,}742{,}400} = \boxed{1.38 \text{ acres}}$$

4) A football field (including the end zone) measures 360 feet by 160 feet. How many acres is that? (1 acre =43,560 ft^2)

$$\frac{57{,}600\text{ft}^2 \mid 1\text{acre}}{\mid 43{,}560\text{ft}^2} = \boxed{1.32 \text{ acres}}$$

5) I weigh 175 pounds. How many kg is this? 1 kg = 2.2 lbs

$$\frac{175\text{lbs} \mid 1\text{kg}}{\mid 2.2\text{lbs}} = \boxed{79.5 \text{ kg}}$$

6) Which metric wrench is closest to a 3/16 inch wrench? (Hint: use the decimal form of this number.)

10 mm = 1 cm

1 in = 2.54 cm

$$\frac{.1875\text{in}}{1\text{ in}} \left| \frac{2.54\text{cm}}{1\text{cm}} \right| \frac{10\text{mm}}{1\text{cm}} = 4.7\text{mm} \approx \boxed{5\text{mm}}$$

7) A 5 mm wrench is how many inches?

$$\frac{5\text{mm}}{10\text{mm}} \left| \frac{1\text{cm}}{2.54\text{cm}} \right| \frac{1\text{inch}}{} = \boxed{\approx .197 \text{ inches}}$$

8) 120 $\frac{ft}{sec}$ = _____ $\frac{mi}{hr}$

$$\frac{120\text{ft}}{1\text{sec}} \left| \frac{1\text{ mile}}{5280\text{ft}} \right| \frac{3600\text{sec}}{1\text{ hour}} = \boxed{81.8\text{ mi/hr}}$$

9) 75 $\frac{m}{sec}$ = _____ mph 1 meter = 3.28ft 5280 ft in a mile

$$\frac{75\text{m}}{\text{Second}} \left| \frac{3600\text{Second}}{1\text{ hour}} \right| \frac{3.28\text{ft}}{1\text{meter}} \left| \frac{1\text{ mile}}{5280\text{ ft}} \right| = 167.7\text{ mph}$$

10) How much is $20 worth in Canada? $1 US = $1.40 Canadian

$$\frac{\$20\text{ US}}{\$1\text{ US}} \left| \frac{\$1.40\text{ CA}}{} \right| = \boxed{\$28^{00}}$$