Name _____ Date _____

1. Solve. The first one is done for you.

a. Convert days to weeks.

42 days = 42 × (1 day)

= 42 × $\left(\frac{1}{7}\text{ week}\right)$

= $\frac{42}{7}$ week

= 6 weeks

b. Convert quarts to gallons.

36 quarts = 36 × ( 1 quart)

= 36 × $\left(\frac{1}{4}\text{ gallon}\right)$

= $\frac{36}{4}$ gallons

= 9 gallons

c. Convert centimeters to meters.

760 cm = 760 × ( 1 cm)

= 760 × ( 0.01 m)

= 7.6 m

d. Convert meters to kilometers.

2,485 m = 2,485 × ( 1 m)

= 2,485 × (0.001 km)

= 2.485 km

e. Convert grams to kilograms.

3,090 g = 3,090 x (1 g)

= 3,090 x (0.001 kg)

= 3.090 kg

= 3.09 kg

f. Convert milliliters to liters.

205 mL = 205 x (1 mL)

= 205 x (0.001 L)

= 0.205 L

2. After solving, write a statement to express each conversion. The first one is done for you.

a. The screen measures 36 inches. Convert 36 inches to feet.

36 inches = 36 × (1 inch)

$= 36 \times \left(\frac{1}{12} \text{ feet}\right)$

$= \frac{36}{12}$ feet

= 3 feet

The screen measures 36 inches or 3 feet.

b. A jug of juice holds 8 cups. Convert 8 cups to pints.

$8c = 8 \times (1\ c)$
$= 8 \times (\frac{1}{2}\ p)$
$= \frac{8}{2}\ p$
$= 4\ p$

One cup makes 1/2 pint, so 8 cups is the same as 4 pints.

c. The length of the flower garden is 529 centimeters. What is its length in meters?

$529\ cm = 529 \times (1\ cm)$
$= 529 \times (0.01\ m)$
$= 5.29\ m$

One centimeter makes 1/100 = 0.01 meter, so 529 centimeters is the same as 5.29 meters.

d. The capacity of a container is 2,060 milliliters. Convert this to liters.

$2{,}060\ mL = 2{,}060 \times (1\ mL)$
$= 2{,}060 \times (0.001\ L)$
$= 2\ 06\ L$

One milliliter makes 1/1,000 = 0.001 liter, so 2,060 milliliters is the same as 2.06 liters.

e. A hippopotamus weighs 1,560,000 grams. Convert the hippopotamus' weight to kilograms.

$1{,}560{,}000\ g = 1{,}560{,}000 \times (1\ g)$
$= 1{,}560{,}000 \times (0.001\ kg)$
$= 1{,}560\ kg$

One gram makes 1/1,000 = 0.001 kilogram, so 1,560,000 grams is the same as 1,560 kilograms.

f. The distance was 372,060 meters. Convert the distance to kilometers.

$372{,}060\ m = 372{,}060 \times (1\ m)$
$= 372{,}060 \times (0.001\ km)$
$= 372.06\ km$

One meter makes 1/1,000 = 0.001 kilometer, so 372,060 meters is the same as 372.06 kilometers.