

## PART 1 – CONVERSIONS IN THE SAME SYSTEMS

Solve the following problems using the table below. Please show any work.

CAPACITY AND VOLUME	
METRIC	U.S. CUSTOMARY
1 liter = 1000 milliliters	1 gallon = 4 quarts
	1 quart = 2 pints
	1 pint = 2 cups

$$2 \times 500 = 1000$$

1. Lila went to the store to buy three 2-liters bottles of pop for a party. The store only sold the pop she wanted in 500 mL bottles. How many bottles does she need to buy?

2 liters

500 ml

She need  
2 liters  
with is  
2000  
ml so you need  
to find how many  
it take to get  
2000 ml.

2. Micah bought 3 gallons of apple cider for the same party. How many cups of cider will he be able to serve?

3 gallons equal 4 quarts

1 quart = 2 pints

1 pint = 2 cups so you

need to x 2 cups  
4 quarts and 3 gallons

$$2 \times 4 = 8$$

$$8 \times 3 = 24$$

24 cup  
can be  
served.

## PART 2 – CONVERSIONS BETWEEN SYSTEMS

Solve the following problems using the table below. Please show any work.

LENGTH	
METRIC TO CUSTOMARY	U.S. CUSTOMARY TO METRIC
1 centimeter 0.39 inch	1 inch = 2.54 centimeters
1 kilometer 0.62 mile	1 mile 1.61 kilometers

1. Eshaan is driving in Canada and the speed limit signs are in kilometers per hour. If the sign says 60 kilometers per hour, what is the approximate speed in miles per hour?

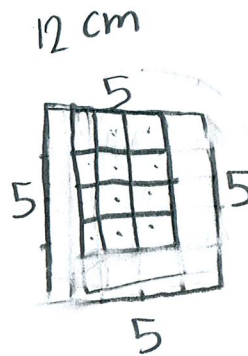
If he drives of 2 hour  
and 1 mile  
is 1.61 Kilometers  
Per  
mile  
you must x

1.61 x 120 to get 193.2

2 hour  
would be  
193.2 miles  
2 hour  
193.2 miles

2. Maya measured the side of a square postcard as 12 cm. Will it fit in a frame that is 5 in by 5 in? Why or why not?

$$5 \times 5 = 25$$



yes a  
12 cm  
would  
fit in  
a 5 by 5

## PART 3 – MULTI-STEP PROBLEM

Solve the following problem. Please show any work.

US. CUSTOMARY	
TIME	LENGTH
1 minute = 60 seconds	1 mile = 5,280 feet

Hannah is trying out for the cross country team at her school. To make the team, she has to complete a mile in 8 minutes or less. Today she ran 9 feet per second. Based on today, would she make the team?

☐ Yes

☒ No

$$8 \text{ min} = 480 \text{ sec}$$

4320 feet per second no  
 She ran 4320 mile in 8 minutes  
 1 mile is 5,280

If No, how much faster (in feet per second) does she need to be in order to make the team?

She need to run 11 feet to get to  
 5280 in 8min

So She need to run  
 88 feet per sec to  
 get to 5280 feet  
 in 60 sec / 1min.