

Name Key

Date _____

1. Find the equivalent measures.

a. 1 kilometer = 1,000 meters. How does this answer help you find how many meters are in 4 kilometers?

b. To find the number of meters in 4km,
you take $4 \times 1,000 = 4,000$ m.

c. 7 kilometers = 7,000 meters

d. 18 kilometers = 18,000 meters

2. Find the equivalent measures.

a. 3 km 312 m = 3,312 meters

(3 km = 3,000 m) + 312 m = 3,312 meters

b. 13 km 27 m = 13,027 meters

(13 km = 13,000 m) + 27 m = 13,027 meters

c. 915 km 8 m = 915,008 meters

(915 km = 915,000 meters) + 8 m = 915,008 meters

3. Solve.

a. $4 \text{ km} - 280 \text{ m} = \underline{3 \text{ km } 720 \text{ m}}$

$$\begin{array}{r} 3 \text{ km} \quad 1000 \text{ m} \\ 1000 \text{ m} \\ - 280 \text{ m} \\ \hline 720 \text{ m} \end{array}$$

b. $1 \text{ m } 15 \text{ cm} - 34 \text{ cm} = \underline{81 \text{ cm}}$

$$\begin{array}{r} 115 \text{ cm} \\ - 34 \text{ cm} \\ \hline 81 \text{ cm} \end{array}$$

4. Write vertically and solve.

$1 \text{ km } 31 \text{ m} + 13 \text{ km } 69 \text{ m} =$

$$\begin{array}{r} 1 \text{ km } 31 \text{ m} \\ + 13 \text{ km } 69 \text{ m} \\ \hline 14 \text{ km } 100 \text{ m} \end{array}$$

$31 \text{ m } 31 \text{ cm} - 14 \text{ m } 48 \text{ cm} =$

$$\begin{array}{r} 0 \quad 131 \\ 31 \text{ m } 31 \text{ cm} \\ - 14 \text{ m } 48 \text{ cm} \\ \hline 16 \text{ m } 83 \text{ cm} \end{array}$$

$67 \text{ km } 230 \text{ m} + 11 \text{ km } 879 \text{ m} =$

$$\begin{array}{r} 67 \text{ km } 230 \text{ m} \\ + 11 \text{ km } 879 \text{ m} \\ \hline 78 \text{ km } 1109 \text{ m} \end{array}$$

$\swarrow \searrow$
 $(1 \text{ km}) \quad (109 \text{ cm})$

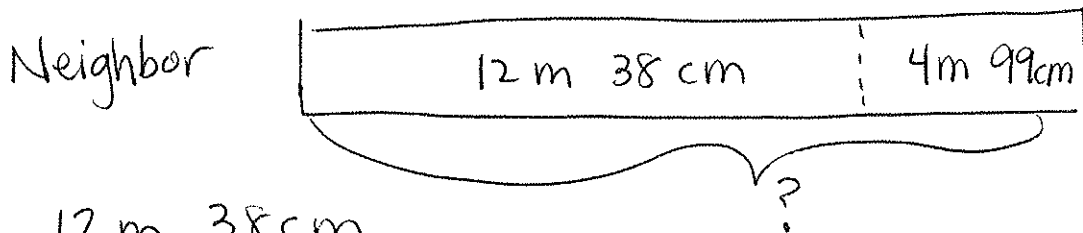
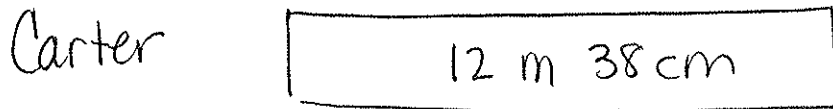
$79 \text{ km } 109 \text{ cm}$

$67 \text{ km } 230 \text{ m} - 11 \text{ km } 279 \text{ m} =$

$$\begin{array}{r} 6 \quad 1230 \\ 67 \text{ km } 230 \text{ m} \\ - 11 \text{ km } 279 \text{ m} \\ \hline 55 \text{ km } 951 \text{ m} \end{array}$$

Use a tape diagram to model each problem.

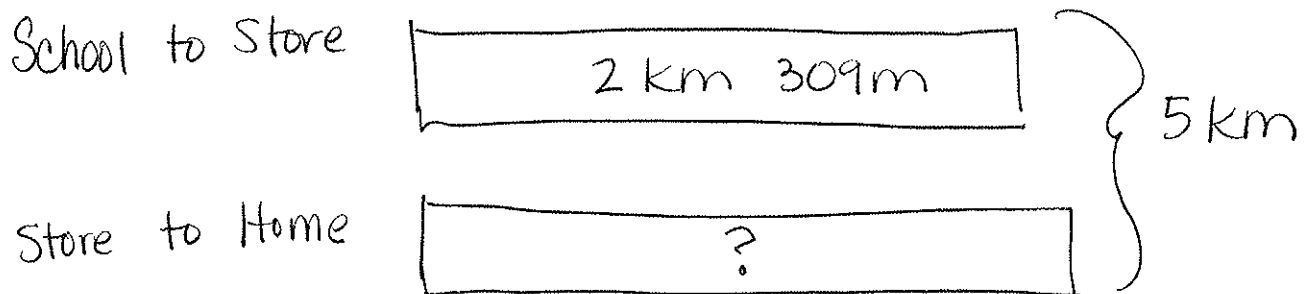
5. The length of Carter’s driveway is 12 m 38 cm. His neighbor’s driveway is 4 m 99 cm longer. How long is the neighbor’s driveway?



$$\begin{array}{r}
 12\text{ m } 38\text{ cm} \\
 + 4\text{ m } 99\text{ cm} \\
 \hline
 16\text{ m } 137\text{ cm} \\
 17\text{ m } 37\text{ cm}
 \end{array}$$

The neighbor's driveway is 17 m 37 cm long.

6. Enya walked 2 km 309 m from school to the store. Then she walked from the store to her home. If she walked a total of 5 km, how far was it from the store to her home?



$$\begin{array}{r}
 5\text{ km} \\
 - 2\text{ km } 309\text{ m} \\
 \hline
 \end{array}
 =
 \begin{array}{r}
 4\text{ } 99 \\
 \underline{5,000\text{ m}} \\
 2,309\text{ m} \\
 \hline
 2,691\text{ m}
 \end{array}$$

From the store to home, it is 2,691 m or 2 km 691 m.

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1. Complete the table and write equivalent measurements.

Mass	
kg	g
1	1,000
3	3,000
4	4,000
17	17,000
20	20,000
300	300,000

1 kg 500 g = 1,500 g

3 kg 715 g = 3,715 g

17 kg 84 g = 17,084 g

25 kg 9 g = 25,009 g

2. Solve. Rename units if possible.

a. 25 kg 9 g + 24 kg 991 g =

$$\begin{array}{r}
 25 \text{ kg } 9 \text{ g} \\
 + 24 \text{ kg } 991 \text{ g} \\
 \hline
 29 \text{ kg } 1000 \text{ g} \\
 30 \text{ kg}
 \end{array}$$

b. 27 kg 650 g - 20 kg 990 g =

$$\begin{array}{r}
 27 \text{ kg } 650 \text{ g} = 27^{\text{kg}} 650^{\text{g}} \\
 20 \text{ kg } 990 \text{ g} - 20,990 \text{ g} \\
 \hline
 6,660 \text{ g} \\
 6 \text{ kg } 660 \text{ g}
 \end{array}$$

c. 14 kg 505 g - 1,288 g =

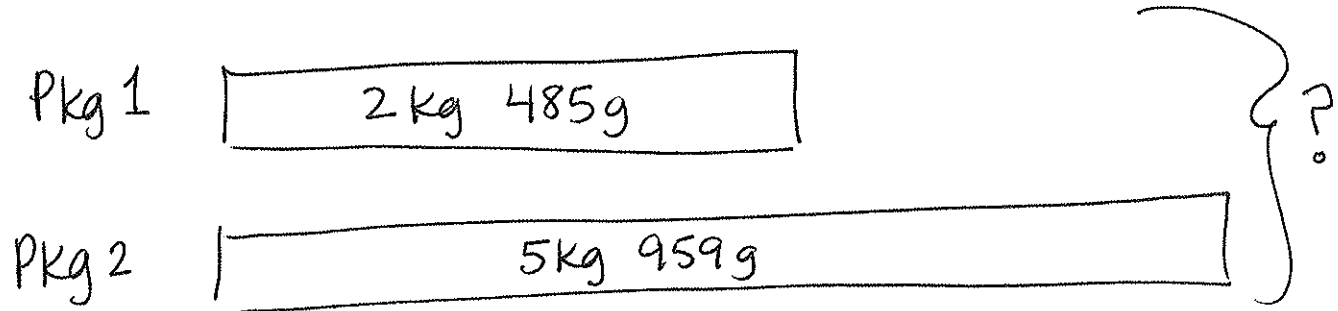
$$\begin{array}{r}
 14 \text{ kg } 505 \text{ g} \quad 14,505 \text{ g} \\
 - 1,288 \text{ g} \quad - 1,288 \text{ g} \\
 \hline
 3,217 \text{ g} \\
 3 \text{ kg } 217 \text{ g}
 \end{array}$$

d. 5 kg 658 g + 481 g =

$$\begin{array}{r}
 5 \text{ kg } 658 \text{ g} \\
 + 481 \text{ g} \\
 \hline
 5 \text{ kg } 1139 \text{ g} \\
 6 \text{ kg } 139 \text{ g}
 \end{array}$$

Directions: Use a tape diagram to model each problem.

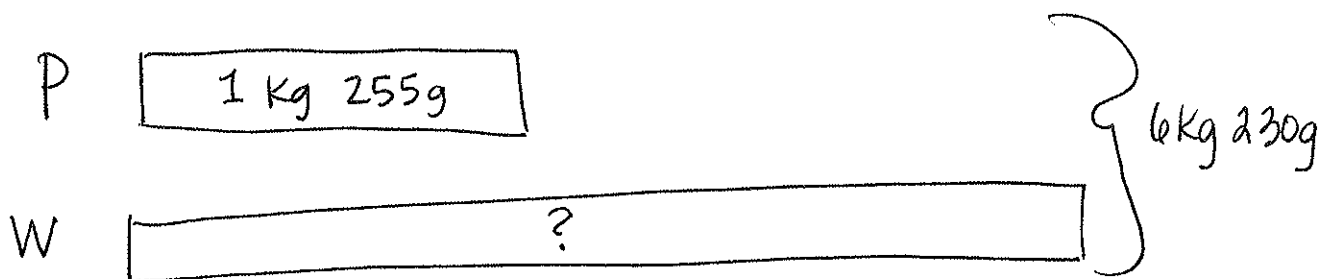
3. One package weighs 2 kg 485 g. Another package weighs 5 kg 959 g. What is the total weight of the two packages?



$$\begin{array}{r}
 2 \text{ kg } 485 \text{ g} \\
 + 5 \text{ kg } 959 \text{ g} \\
 \hline
 7 \text{ kg } 1444 \text{ g} \\
 8 \text{ kg } 444 \text{ g}
 \end{array}$$

The total weight
is 8 kg 444g.

4. Together, a pineapple and a watermelon weigh 6 kg 230 g. If the pineapple weighs 1 kg 255 g, how much does the watermelon weigh?



$$\begin{array}{r}
 6 \text{ kg } 230 \text{ g} \\
 - 1 \text{ kg } 255 \text{ g} \\
 \hline
 4,975 \text{ g} = 4 \text{ kg } 975 \text{ g}
 \end{array}$$

The watermelon
weighs 4kg 975g.

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1. Find the missing numbers.

a. 2 L 500 mL = 2,500 mL

b. 70 L 850 mL = 70,850 mL

c. 33 L 15 mL = 33,015 mL

d. 2 L 8 mL = 2,008 mL

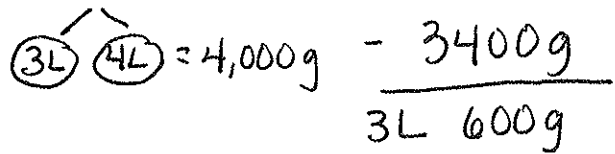
2. Solve.

a. 1,760 mL + 40 L =

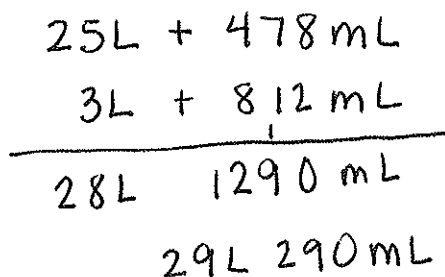


41 L 760 mL

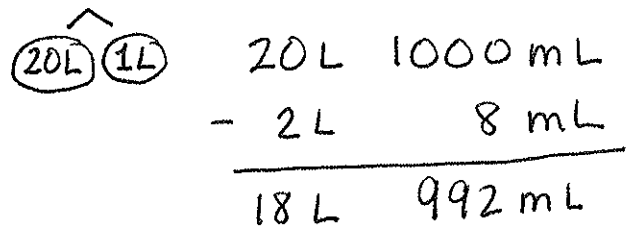
b. 7 L - 3,400 mL = 3 L 4000 g



c. 25 L 478 mL + 3 L 812 mL =



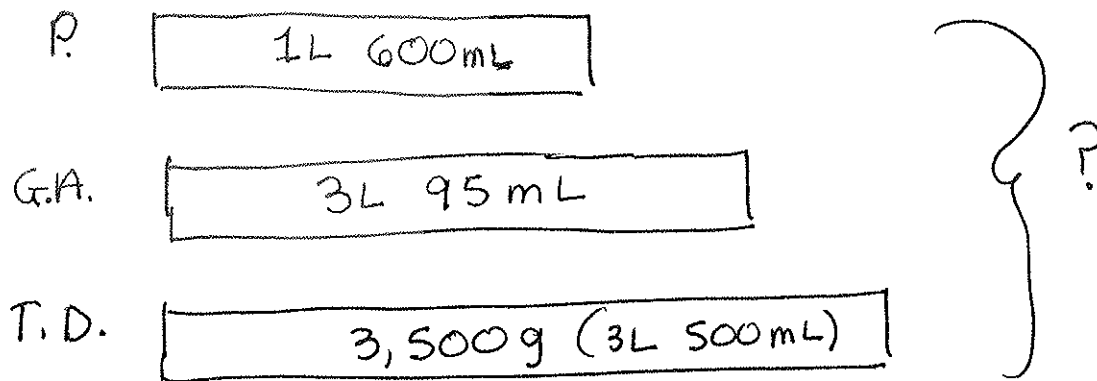
d. 21 L - 2 L 8 mL =



Directions: Use a tape diagram to model each problem.

3. John’s mother combined 3,500 milliliters of tropical drink, 3 liters 95 milliliters of ginger ale, and 1 liter 600 milliliters of pineapple juice to make punch.

a. Use a tape diagram to order the quantity of each drink from least to greatest.



b. How much punch did John’s mother make?

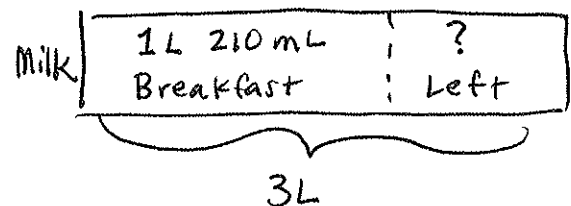
John's mother made
8L 195mL of punch.

$$\begin{array}{r}
 1\text{L } 600\text{ mL} \\
 3\text{L } 95\text{ mL} \\
 3\text{L } 500\text{ mL} \\
 \hline
 7\text{L } 1195\text{ mL} = 8\text{L } 195\text{ mL}
 \end{array}$$

4. A family drank 1 liter 210 milliliters of milk at breakfast. If there were 3 liters of milk before breakfast, how much milk is left?

$$\begin{array}{r}
 3\text{L} - 1\text{L } 210\text{ mL} \\
 \begin{array}{l} \textcircled{2\text{L}} \quad \textcircled{1\text{L}} \\ \swarrow \quad \searrow \end{array} \\
 2\text{L } 1000\text{ mL} \\
 - 1\text{L } 210\text{ mL} \\
 \hline
 1\text{L } 790\text{ mL}
 \end{array}$$

There is 1L 790mL of milk left.



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1. Complete the following table.

Smaller Unit	Larger Unit	How Many Times as Large
one	hundred	100
centimeter	meter	100
one	thousand	1,000
gram	kilogram	1,000
meter	kilometer	1,000
milliliter	liter	1,000
centimeter	kilometer	100,000

2. Fill in the units in word form.

a. 429 is 4 hundreds and 29 ones

b. 429 cm is 4 meters and 29 centimeters

c. 2,456 is 2 thousands and 456 ones

d. 2,456^m is 2 kilometers and 456 meters

e. 13,709 is 13 thousands and 709 ones

f. 13,709^g is 13 kilograms and 709 grams

3. Compare using $>$, $<$, or $=$.

a. 893,503 mL $>$ 89 L 353 mL

893 L 503 mL

b. 410 km 3 m $>$ 4,103 m

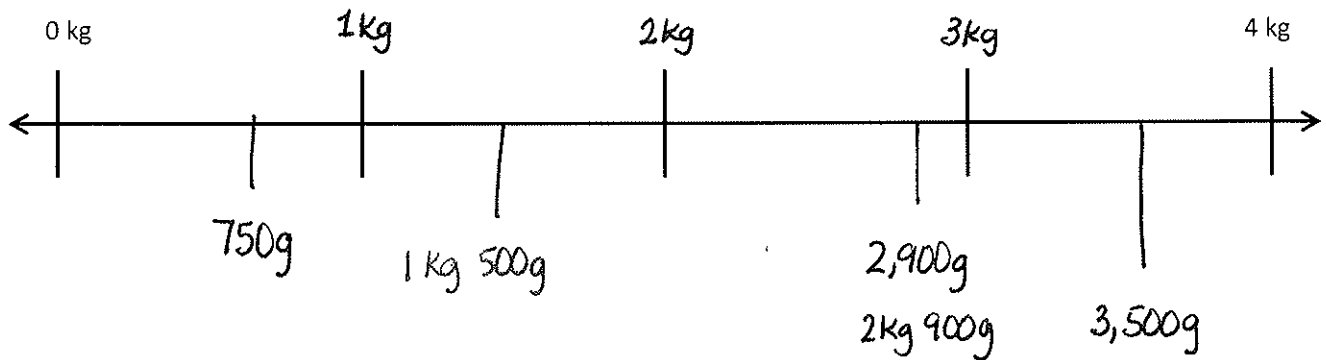
4 km 103 m

c. 339 m $>$ 900 cm

9 m 0 cm

4. Place the following measurements on the number line:

2 kg 900 g ✓ 3 kg 500 g 3,500 g ✓ 1 kg 500 g ✓ 2 kg 900 g 2,900 g ✓ 750 g ✓



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Directions: Solve. Model the problems using a tape diagram

1. The potatoes Beth bought weighed 3 kilograms 420 grams. Her onions weighed 1,050 grams less than the potatoes. How much did the potatoes and onions weigh altogether?

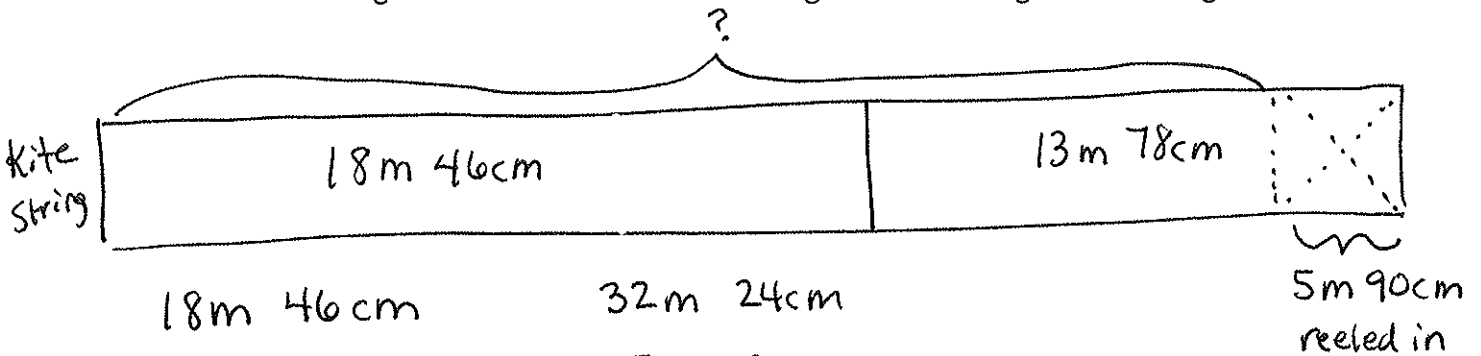
P. 3kg 420g }
 O. ? 1,050g }

$$\begin{array}{r} 3420g \\ - 1050g \\ \hline 2370g = 2kg\ 370g \\ \text{(onions)} \end{array}$$

$$\begin{array}{r} 3kg\ 420g \\ 2kg\ 370g \\ \hline 5kg\ 790g \end{array}$$

Together, the potatoes and onions weighed 5kg 790g.

2. Adele let out 18 m 46 cm of string to fly her kite. She then let out 13 m 78 cm more before reeling back in 5 m 90 cm. How long was her string after reeling it in?



$$\begin{array}{r} 18m\ 46cm \\ + 13m\ 78cm \\ \hline 31m\ 124cm \end{array}$$

32m 24cm
Total string

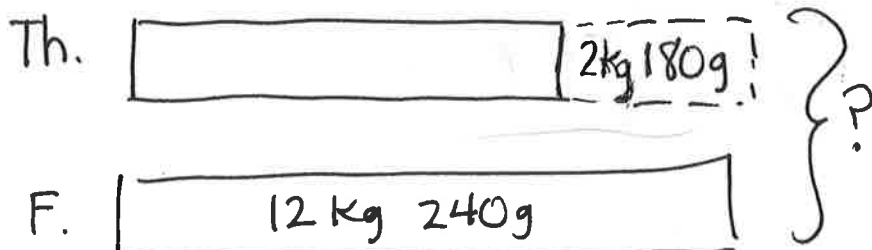
$$\begin{array}{r} 32m\ 24cm \\ - 5m\ 90cm \\ \hline \end{array}$$

↓

$$\begin{array}{r} 31m\ 124cm \\ - 5m\ 90cm \\ \hline 26m\ 34cm \end{array}$$

After reeling in string, there was a total of 26 m 34 cm of string out.

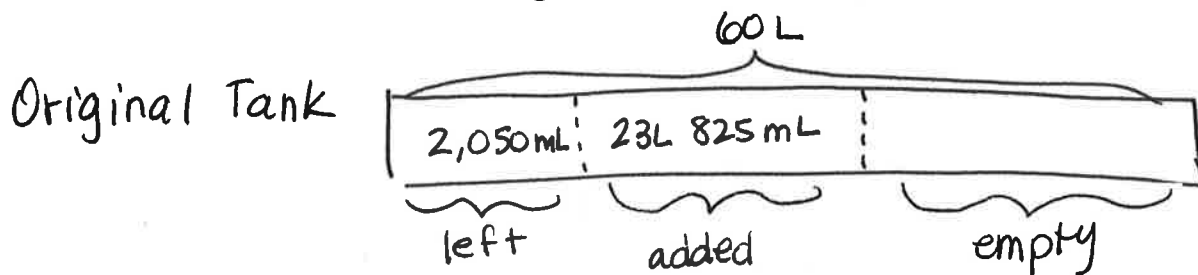
3. On Thursday, the pizzeria used 2 kilograms 180 grams less flour than they used on Friday. On Friday, they used 12 kilograms 240 grams. What was the total amount of flour used over the two days?



In two days,
they used
22 Kg 300 g.

$$\begin{array}{r}
 12 \text{ Kg } 240 \text{ g} \\
 - 2 \text{ Kg } 180 \text{ g} \\
 \hline
 10 \text{ Kg } 60 \text{ g} = \text{Thurs.}
 \end{array}
 \qquad
 \begin{array}{r}
 10 \text{ Kg } 60 \text{ g} \\
 + 12 \text{ Kg } 240 \text{ g} \\
 \hline
 22 \text{ Kg } 300 \text{ g}
 \end{array}$$

4. Zachary's car holds 60 liters of gas. When he had 2,050 milliliters of gas left, he added 23 liters 825 milliliters gas. How much more gas can Zachary add to his car?



$$\begin{array}{r}
 2 \text{ L } 50 \text{ mL} \\
 + 23 \text{ L } 825 \text{ mL} \\
 \hline
 25 \text{ L } 875 \text{ mL} \\
 \text{gas in tank}
 \end{array}$$

$$\begin{array}{r}
 60 \text{ L} \\
 - 25 \text{ L } 875 \text{ mL} \\
 \hline
 \downarrow \\
 59 \text{ L } 1000 \text{ mL} \\
 - 25 \text{ L } 875 \text{ mL} \\
 \hline
 34 \text{ L } 125 \text{ mL}
 \end{array}$$

Zach can add 34L 125mL more gas.