Name: **Answer Key**   Date: _____

End-of- Module 2 Review

1. Eli is going on a vacation and buys pretzels and carrots to bring in the car. The <u>pretzels weigh 314 grams,</u> and the carrots weigh 453 grams. What is the <u>difference</u> between the weight of the pretzels and the carrots?
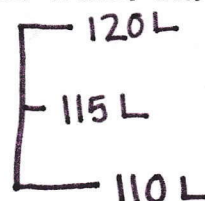
$$
\begin{array}{r}
4\,\overset{4}{\cancel{5}}\overset{13}{\cancel{3}}g \\
-\ 314g \\
\hline
139g
\end{array}
$$

Eli's pretzels and carrots has a difference of 139g

2. Sarai drinks about 115 L of water in one month.

    a. Round to the <u>nearest ten</u> how many liters of water Sarai drinks in one month.

$$115 L \approx 120 L$$

┌─ 120 L
│
├─ 115 L
│
└─ 110 L

    b. Use your estimate to find about how many liters of water Sarai drinks in _3_ months.

$$
\begin{array}{r}
120L \\
120L \\
+\ 120L \\
\hline
360L
\end{array}
$$

Sarai drinks about 360 L a month.

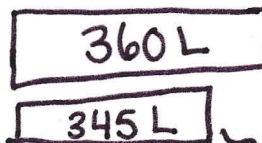   c. Calculate **precisely** how much water Sarai drinks in 3 months.

$$
\begin{array}{r}
115L \\
115L \\
+\ 115L \\
\hline
345L
\end{array}
$$

Sarai drinks 345 L in 3 months.

    d. Draw a tape diagram to find the **difference** between your estimate and the precise calculation. Estimate – 360 L   Precise – 345 L

$$
\begin{array}{r}
\overset{5}{\cancel{3}}\overset{10}{\cancel{6}}0 L \\
-\ 345L \\
\hline
15L
\end{array}
$$

$$360L - 345L = 15L$$

┌──────────┐
│ 360 L   │
└──────────┘
┌────────┐
│ 345 L │
└────────┘

3. Reagan just went grocery shopping and the weight of one grocery bag is 15 kg.

    a. Reagan lifts 4 bags of the same weight. _Round_ to the nearest 10 to estimate the total weight Reagan lifts. Then calculate the number _exactly_.

| Rounded	Precise Calculation
$15g + 15g + 15g + 15g =$ $20g + 20g + 20g + 20g = 80g$	$\begin{array}{r} 15g \\ 15g \\ 15g \\ +\ 15g \\ \hline 60g \end{array}$ Reagan lifts 60g.

b. Reagan's friend, Isaee, lifts grocery bags of 100 kilograms. Write and solve an equation to show how much more weight Isaee lifts than Reagan (in part a).

Reagan – 60g   Isaee – 100kg

$$\begin{array}{r} \overset{0\ 10}{\cancel{1}\cancel{0}0\,kg} \\ -\ 60\,kg \\ \hline 40\,kg \end{array}$$

100 kg

60kg
?

Isaee lifts 40 kg more than Reagan.

c. Together, it takes Reagan and Isaee 23 minutes to unload all of the groceries. If they start unloading the groceries at 9:25 pm., what time will they finish unloading the groceries? Use a number line to help you!
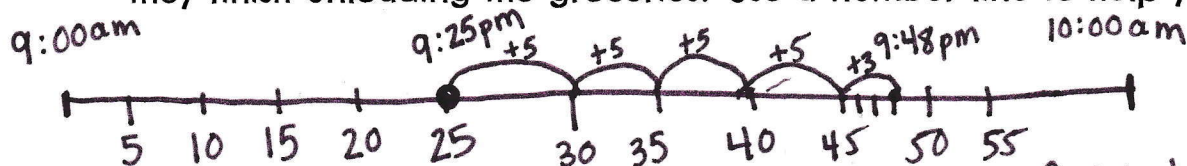
They will finish by 9:48pm.

4. When driving, Mrs. Bower uses 56 L of fuel every minute.

a. Round to the nearest ten liters to estimate how many liters of fuel get used every minute.

$$56L \approx 60L$$

Mrs. Bower uses about 60L.

b. Use your estimate to find about how many liters of fuel gets used 3 minutes.

$$60L + 60L + 60L = 180L$$

Mrs. Bower uses about 180L every 3 minutes.

c. Calculate precisely how many liters of fuel get used every 3 minutes.

$$\begin{array}{r} \overset{①}{56L} \\ 56L \\ +\ 56L \\ \hline 168L \end{array}$$

Mrs. Bower uses 168L every 3 minutes.

d. Draw a tape diagram to find the difference between your estimation and precise calculation.

Estimate: 180L   Precise: 168L

180L

168L
?

$$\begin{array}{r} \overset{7\ 10}{\cancel{1}\cancel{8}0L} \\ -\ 168L \\ \hline 12L \end{array}$$

The difference was 12L.

5. Rishon goes to Safeway to buy chocolate chip cookies. Yum! He gets to the store at 3:31 and leaves the store at 3:57. Use a number line to determine how many minutes Rishon was at Safeway.
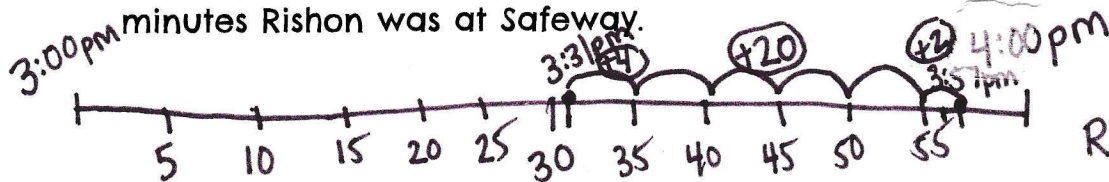
4+20+2= 26min.

Rishon was at Safeway for 26min.