Name _____ Date _____

1. Solve the subtraction problems below.

a. 381 mL − 146 mL

$$\begin{array}{r} {}^{7}{}^{11} \\ 3\not{8}\not{1} \\ -\ 146 \\ \hline 235\ ml \end{array}$$

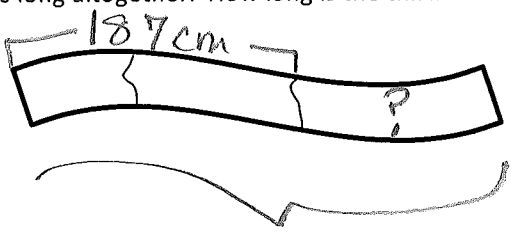
b. 730 m − 426 m

$$\begin{array}{r} {}^{3}{}^{10} \\ 7\not{3}\not{0} \\ -\ 426 \\ \hline 304\ m \end{array}$$

c. 509 kg − 384 kg

$$\begin{array}{r} {}^{4}{}^{10} \\ 5\not{0}\not{9} \\ -\ 384 \\ \hline 125\ kg \end{array}$$

2. The total length of a banner is 408 centimeters. Carly paints it in 3 sections. The first 2 sections she paints are 187 centimeters long altogether. How long is the third section?




$$\begin{array}{r} 3\ {}^{3}{}^{10} \\ 4\not{0}\not{8} \\ -\ 187 \\ \hline 221\ cm \end{array}$$

The third section is 221 cm.

Name _____ Date _____

1. Solve the subtraction problems below.

a. 70 L − 46 L

$$\begin{array}{r} {}^{6}\cancel{7}{}^{10}0\text{ L} \\ -\ 46\text{ L} \\ \hline 24\text{ L} \end{array}$$

b. 370 L − 46 L

$$\begin{array}{r} 3{}^{6}\cancel{7}{}^{10}0\text{ L} \\ -\ 46\text{ L} \\ \hline 324\text{ L} \end{array}$$

c. 370 L − 146 L

$$\begin{array}{r} 3{}^{9}\cancel{7}{}^{10}0\text{ L} \\ -\ 146\text{ L} \\ \hline 224\text{ L} \end{array}$$

d. 607 cm − 32 cm

$$\begin{array}{r} 5\cancel{6}{}^{10}07\text{ cm} \\ -\ 32\text{ cm} \\ \hline 575\text{ cm} \end{array}$$

e. 592 cm − 258 cm

$$\begin{array}{r} 5{}^{8}9{}^{12}2\text{ cm} \\ -\ 258\text{ cm} \\ \hline 334\text{ cm} \end{array}$$

f. 918 cm − 553 cm

$$\begin{array}{r} 8{}^{9}9{}^{11}18\text{ cm} \\ 553\text{ cm} \\ \hline 365\text{ cm} \end{array}$$

g. 763 g − 82 g

$$\begin{array}{r} {}^{6}\cancel{7}{}^{16}63\text{ g} \\ -\ 82\text{ g} \\ \hline 681\text{ g} \end{array}$$

h. 803 g − 542 g

$$\begin{array}{r} 7{}^{7}8{}^{10}03\text{ g} \\ -\ 542\text{ g} \\ \hline 261\text{ g} \end{array}$$

i. 572 km − 266 km

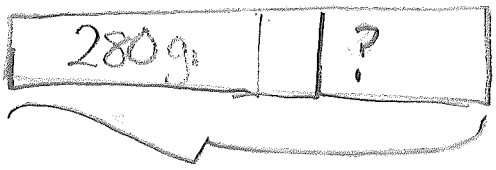
$$\begin{array}{r} 5{}^{4}7{}^{12}2\text{ km} \\ -\ 266\text{ km} \\ \hline 306\text{ km} \end{array}$$

j. 837 km − 645 km

$$\begin{array}{r} 7{}^{7}8{}^{13}37\text{ km} \\ -\ 645\text{ km} \\ \hline 192\text{ km} \end{array}$$

2. A magazine weighs 280 grams less than a newspaper. The weight of the newspaper is shown below. How much does the magazine weigh? Use a tape diagram to model your thinking.


454 g




454g total weight

3 15
4 5 4 g
- 280 g
174 g

The magazine weighs 174g.

3. The chart to the right shows how long 3 games take.

| | |
|---|---|
| Lucas' Baseball Game | 180 minutes |
| Joey's Football Game | 139 minutes |
| Francesca's Basketball Game | ____minutes |

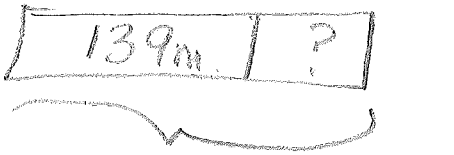
a. Francesca's basketball game is 22 minutes shorter than Lucas' baseball game. How long is Francesca's basketball game?

7 10
1 8 0
- 2 2
1 5 8 minutes

Francesca's game is 158 minutes.

b. How much longer is Francesca's basketball game than Joey's football game?

4 18
1 5 8
- 1 3 9
1 9




158 minutes

Francesca's basketball game is 19 minutes longer.

Name _____ Date _____

1. Solve the subtraction problems below.

a. 346 m – 187 m

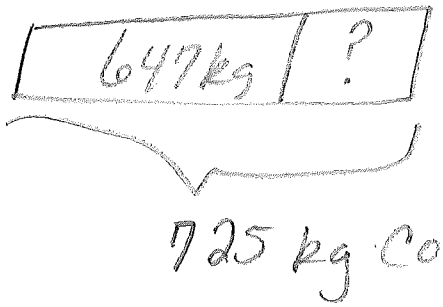
$$\begin{array}{r} {}^{2}\cancel{3}{}^{13}\cancel{4}{}^{1}\cancel{6}\text{ m} \\ -\ 187\text{ m} \\ \hline 159\text{ m} \end{array}$$

b. 700 kg – 592 kg

$$\begin{array}{r} {}^{6}\cancel{7}{}^{9}\cancel{0}{}^{10}0 \\ -\ 592 \\ \hline 108\text{ kg} \end{array}$$

2. A sheep weighs about 647 kilograms less than a cow. A cow weighs about 725 kilograms. About how much does a sheep weigh?

$$\begin{array}{r} {}^{6}\cancel{7}{}^{11}\cancel{2}{}^{15}5\text{ kg} \\ -\ 647\text{ kg} \\ \hline 78\text{ kg} \end{array}$$




A sheep weighs 78 kg.

Name _____ Date _____

1. Solve the subtraction problems below.

a. 280 g − 90 g

$$\begin{array}{r} {}^{1}\not{2}\,{}^{8}\not{8}0\text{ g} \\ -\ 90\text{ g} \\ \hline 190\text{ g} \end{array}$$

b. 450 g − 284 g

$$\begin{array}{r} 3\,{}^{4}\not{5}\,{}^{10}\not{0}\text{ g} \\ -\ 284\text{ g} \\ \hline 166\text{ g} \end{array}$$

c. 423 cm − 136 cm

$$\begin{array}{r} 3\,{}^{1}\not{4}\,{}^{1}\not{2}\,{}^{1}\not{3}\text{ cm} \\ -\ 136\text{ cm} \\ \hline 287\text{ cm} \end{array}$$

d. 567 cm − 246 cm

$$\begin{array}{r} 567\text{ cm} \\ -\ 246\text{ cm} \\ \hline 321\text{ cm} \end{array}$$

e. 900 g − 58 g

$$\begin{array}{r} 8\,{}^{9}\not{9}\,{}^{10}\not{0}\text{ g} \\ -\ 58\text{ g} \\ \hline 842\text{ g} \end{array}$$

f. 900 g − 358 g

$$\begin{array}{r} 8\,{}^{9}\not{9}\,{}^{10}\not{0}\text{ g} \\ -\ 358\text{ g} \\ \hline 542\text{ g} \end{array}$$

g. 4 L 710 mL − 2 L 690 mL

4 − 2 = 2 L

$$\begin{array}{r} 6\,{}^{7}\not{1}\,{}^{1}\not{0}\text{ mL} \\ -\ 690\text{ mL} \\ \hline 20\text{ mL} \end{array}$$

2 L 20 mL

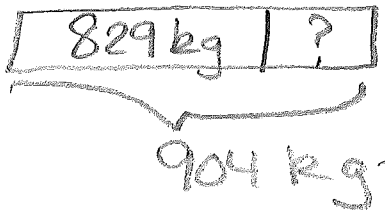
h. 8 L 830 mL − 4 L 378 mL

8 − 4 = 4 L

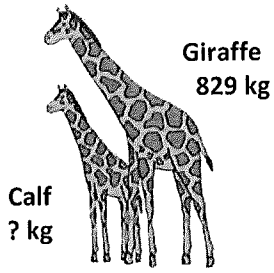
$$\begin{array}{r} 7\,{}^{12}\not{8}\,{}^{10}\not{3}\not{0} \\ -\ 378 \\ \hline 452\text{ mL} \end{array}$$

4 L 452 ml

2. The total weight of a giraffe and her calf is 904 kilograms. How much does the calf weigh? Use a tape diagram to model your thinking.

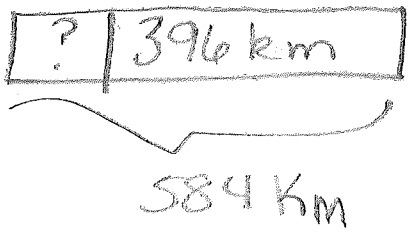



$\overset{8}{\cancel{9}}\overset{14}{\cancel{0}}\overset{1}{4}$
$-829$
$75$ kg




The calf weighs 75 kg.

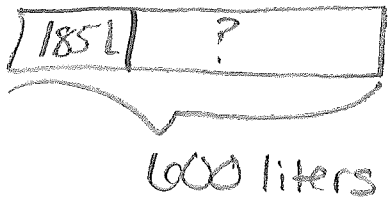
3. The Erie Canal runs 584 kilometers from Albany to Buffalo. Salvador travels on the canal from Albany. He must travel 396 kilometers more before he reaches Buffalo. How many kilometers has he traveled so far?




$4\ \overset{17}{\cancel{5}}\overset{14}{\cancel{8}}\overset{1}{4}$ km
$-396$ km
$188$ km

Salvador has traveled 188 km so far.

4. Mr. Nguyen fills two inflatable pools. The kiddie pool holds 185 liters of water. The larger pool holds 600 liters of water. How much more water does the larger pool hold than the kiddie pool?




$5\ \overset{9}{\cancel{6}}\overset{10}{\cancel{0}}\overset{1}{0}$
$-185$
$415$ L

The larger pool hold 415 more liters.

**A** # Correct _____

Round to the nearest hundred.

| | | | | | |
|---|---|---|---|---|---|
| 1 | 201 ≈ | 200 | 23 | 350 ≈ | 400 |
| 2 | 301 ≈ | 300 | 24 | 1350 ≈ | 1,400 |
| 3 | 401 ≈ | 400 | 25 | 450 ≈ | 500 |
| 4 | 801 ≈ | 800 | 26 | 5450 ≈ | 5,500 |
| 5 | 1801 ≈ | 1,800 | 27 | 850 ≈ | 900 |
| 6 | 2801 ≈ | 2,800 | 28 | 6850 ≈ | 6,900 |
| 7 | 3801 ≈ | 3,800 | 29 | 649 ≈ | 600 |
| 8 | 7801 ≈ | 7,800 | 30 | 651 ≈ | 700 |
| 9 | 290 ≈ | 300 | 31 | 691 ≈ | 700 |
| 10 | 390 ≈ | 400 | 32 | 791 ≈ | 800 |
| 11 | 490 ≈ | 500 | 33 | 891 ≈ | 900 |
| 12 | 890 ≈ | 900 | 34 | 991 ≈ | 1,000 |
| 13 | 1890 ≈ | 1,900 | 35 | 995 ≈ | 1,000 |
| 14 | 2890 ≈ | 2,900 | 36 | 998 ≈ | 1,000 |
| 15 | 3890 ≈ | 3,900 | 37 | 9998 ≈ | 10,000 |
| 16 | 7890 ≈ | 7,900 | 38 | 7049 ≈ | 7,000 |
| 17 | 512 ≈ | 500 | 39 | 4051 ≈ | 4,100 |
| 18 | 2512 ≈ | 2,500 | 40 | 8350 ≈ | 8,400 |
| 19 | 423 ≈ | 400 | 41 | 3572 ≈ | 3,600 |
| 20 | 3423 ≈ | 3,400 | 42 | 9754 ≈ | 9,700 |
| 21 | 677 ≈ | 700 | 43 | 2915 ≈ | 2,900 |
| 22 | 4677 ≈ | 4,700 | 44 | 9996 ≈ | 10,000 |

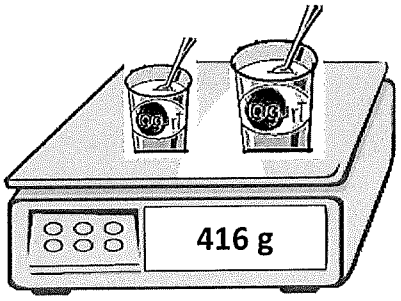
**B** Improvement _____ # Correct _____

Round to the nearest hundred.

| | | | | | |
|---|---|---|---|---|---|
| 1 | 101 ≈ | 100 | 23 | 250 ≈ | 300 |
| 2 | 201 ≈ | 200 | 24 | 1250 ≈ | 1,300 |
| 3 | 301 ≈ | 300 | 25 | 350 ≈ | 400 |
| 4 | 701 ≈ | 700 | 26 | 5350 ≈ | 5,400 |
| 5 | 1701 ≈ | 1,700 | 27 | 750 ≈ | 800 |
| 6 | 2701 ≈ | 2,700 | 28 | 6750 ≈ | 6,800 |
| 7 | 3701 ≈ | 3,700 | 29 | 649 ≈ | 600 |
| 8 | 8701 ≈ | 8,700 | 30 | 652 ≈ | 700 |
| 9 | 190 ≈ | 200 | 31 | 692 ≈ | 700 |
| 10 | 290 ≈ | 300 | 32 | 792 ≈ | 800 |
| 11 | 390 ≈ | 400 | 33 | 892 ≈ | 900 |
| 12 | 790 ≈ | 800 | 34 | 992 ≈ | 1,000 |
| 13 | 1790 ≈ | 1,800 | 35 | 996 ≈ | 1,000 |
| 14 | 2790 ≈ | 2,800 | 36 | 999 ≈ | 1,000 |
| 15 | 3790 ≈ | 3,800 | 37 | 9999 ≈ | 10,000 |
| 16 | 8790 ≈ | 8,800 | 38 | 4049 ≈ | 4000 |
| 17 | 412 ≈ | 400 | 39 | 2051 ≈ | 2,000 |
| 18 | 2412 ≈ | 2,400 | 40 | 7350 ≈ | 7,400 |
| 19 | 523 ≈ | 500 | 41 | 4572 ≈ | 4,600 |
| 20 | 3523 ≈ | 3,500 | 42 | 8754 ≈ | 8,700 |
| 21 | 877 ≈ | 900 | 43 | 3915 ≈ | 3,900 |
| 22 | 4877 ≈ | 4,900 | 44 | 9997 ≈ | 10,000 |

Name _____ Date _____

1. Kathy buys a total of 416 grams of frozen yogurt for herself and a friend. She buys 1 large cup and 1 small cup.




| | |
|---|---|
| **Large Cup** | 363 grams |
| **Small Cup** | ? grams |

a. Estimate how many grams are in a small cup of yogurt by rounding.

400 - 360 = 40 grams

b. Estimate how many grams are in a small cup of yogurt by rounding in a different way.

410 - 360 = 50 grams

c. How many grams are actually in a small cup of yogurt?

$$\begin{array}{r} 3\,^{1}4\,^{1}16 \\ -\,363 \\ \hline 53 \end{array}$$ grams

d. Is your answer reasonable? Which estimate was closer to the exact weight? Explain why.

My answers is reasonable. When I rounded to the nearest 10 my answer was closer because my numbers I rounded were closer to the actual numbers.

Name _____ Date _____

Estimate, and then solve each problem.

1. Melissa and her mom go on a road trip. They drive 87 kilometers before lunch. They drive 59 kilometers after lunch.

   a. Estimate how many more kilometers they drive before lunch than after by rounding to the nearest 10 kilometers.

   90 - 60 = 30 km

   b. Precisely how much farther do they drive before lunch than after lunch?

   $\begin{array}{r} {}^{7}\cancel{8}{}^{17}\cancel{7} \\ -\ 59 \\ \hline 28\ km \end{array}$

   c. Compare your estimate from (a) to your answer from (b). Is your answer reasonable? Write a sentence to explain your thinking.

   My answer is reasonable it is within 2km of the precise answer.

2. Amy measures ribbon. She measures a total of 393 centimeters of ribbon and cuts it into 2 pieces. The first piece is 184 centimeters long. How long is the second piece of ribbon?

   a. Estimate the length of the second piece of ribbon by rounding in two different ways.

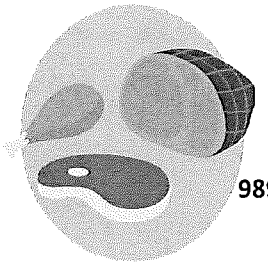
   400 - 200 = 200 cm | 390 - 180 = 210 cm

   b. Precisely how long is the second piece of ribbon? Explain why one estimate was closer.

   $\begin{array}{r} {}^{2}\cancel{3}{}^{13}\cancel{9}{}^{1}\cancel{3} \\ -\ 184 \\ \hline 209\ cm \end{array}$

   The estimate of 210 cm were I rounded to the nearest 10 was closer because the estimate is closer to the real numbers.

3. The weight of a chicken leg, steak, and ham are shown to the right. The chicken and the steak together weigh 341 grams. How much does the ham weigh?



989 grams

a. Estimate the weight of the ham by rounding.

990 - 340 = 650 g

b. How much does the ham actually weigh?

989
-341
648 grams

4. Kate uses 506 liters of water each week to water plants. She uses 252 liters to water the plants in the greenhouse. How much water does she use for the other plants?

a. Estimate how much water Kate uses for the other plants by rounding.

500 - 300 = 200 liters

b. Estimate how much water Kate uses for the other plants by rounding a different way.

500 - 250 = 250 liters

c. How much water does Kate use for the other plants? Which estimate was closer? Explain why.

4 18
5 0 6
-252
254 liters

When I rounded to the nearest 10 my answer was closer because my numbers were closer to the numbers in the actual problem.

Name _____ Date _____

Rogelio drinks water at every meal. At breakfast he drinks 237 milliliters. At lunch he drinks 300 milliliters. At dinner he drinks 177 milliliters.

a. Estimate the total amount of water Rogelio drinks. Then find the actual amount of water he drinks at all 3 meals.

B 237 ml ≈ 240 ml
L 300 ml ≈ 300 ml
D 177 ml ≈ 180 ml

240
300
+180
720 ml
est.

237
300
+177
714 ml
actual

b. Estimate how much more water Rogelio drinks at lunch than at dinner. Then find how much more water Rogelio drinks at lunch than at dinner.

L 300 ml ≈ 300 ml
D 177 ml ≈ 180 ml

300
- 180
120 ml
estimate

300
- 177
123 ml
actual

3. The Blue Team runs a relay. The chart shows the time in minutes that each team member spent running.

| Blue Team | Time in Minutes |
|---|---|
| Jen | 5 minutes |
| Kristin | 7 minutes |
| Lester | 6 minutes |
| Evy | 8 minutes |
| Total | 26 min |

a. How many minutes does it take the Blue Team to run the relay?

5+7+6+8 = 26 min

b. It takes the Red Team 37 minutes to run the relay. Estimate, and then find the difference in time between the 2 teams.

Red - Blue = difference

37 - 26 = 11 min. actual

40 - 30 = 10 min. estimate

37
-26
11

4. The lengths of 3 banners are shown to the right.

| | |
|---|---|
| Banner A | 437 cm |
| Banner B | 457 cm |
| Banner C | 332 cm |

a. Estimate, and then find the total length of Banner A and Banner C.

A = 437 cm
C = 332 cm

A + C = total

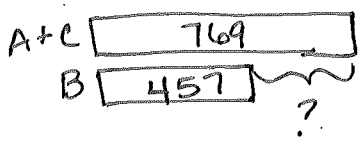
437 + 332 = 769 cm

440 + 330 = 770 cm estimate

437
+332
769

b. Estimate, and then find the difference in length between Banner B and the total length of Banner A and Banner C. Model the problem with a tape diagram.

(A+C) − B = ____ cm




estimate

770 − 460 = 310 cm

actual

769 − 457 = 312 cm

770
-460
310

769
-457
312

Name _____ Date _____

1. There are 153 milliliters of juice in 1 carton. A 3-pack of juice boxes contains a total of 459 milliliters.
   a. Estimate, and then find the total amount of juice in 1 carton and a 3-pack of juice boxes.

153 mL + 459 mL ≈ 150 + 460 = 610

460
+150
610

153 mL + 459 mL = 612

153
+459
612

   b. Estimate, and then find the difference between the amount in 1 carton and a 3-pack of juice boxes.

459 mL − 153 mL ≈ 460 + 150 = 310 ml

460
-150
310

459 mL − 153 mL = 306ml

459
-153
306

   c. Are your answers reasonable? Why?

yes - they are close to the estimates

2. Mr. Williams owns gas stations. He sells 367 liters of gas in the morning, 300 liters of gas in the afternoon, and 219 liters of gas in the evening.
   a. Estimate, and then find the total amount of gas he sells in one day.

M 367 ≈ 370
A 300 ≈ 300
E 219 ≈ 220

≈ 370 + 300 + 220 = 890

367 + 300 + 219 = 886

370
300
+220
890

367
300
+219
886

   b. Estimate, and then find the difference between the amount of gas Mr. Williams sells in the morning and the amount he sells in the evening.

morning - evening = difference

367 − 219 = 148

370
-220
150

370 − 220 = 150 estimate

367
-219
148