

# A Story of Units<sup>®</sup>

## Eureka Math<sup>™</sup>

### Grade 3, Module 2

### Student File\_B

*Contains Sprint and Fluency, Exit Ticket,  
and Assessment Materials*

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10 9 8 7 6 5 4 3 2 1

# Sprint and Fluency Packet

**A**

Number Correct: \_\_\_\_\_

Find the Halfway Point

1.	0	_____	10
2.	10	_____	20
3.	20	_____	30
4.	70	_____	80
5.	80	_____	70
6.	40	_____	50
7.	50	_____	40
8.	30	_____	40
9.	40	_____	30
10.	70	_____	60
11.	60	_____	70
12.	80	_____	90
13.	90	_____	100
14.	100	_____	90
15.	90	_____	80
16.	50	_____	60
17.	150	_____	160
18.	250	_____	260
19.	750	_____	760
20.	760	_____	750
21.	80	_____	90
22.	180	_____	190

23.	280	_____	290
24.	580	_____	590
25.	590	_____	580
26.	30	_____	40
27.	930	_____	940
28.	70	_____	60
29.	470	_____	460
30.	90	_____	100
31.	890	_____	900
32.	990	_____	1,000
33.	1,000	_____	1,010
34.	70	_____	80
35.	1,070	_____	1,080
36.	1,570	_____	1,580
37.	480	_____	490
38.	1,480	_____	1,490
39.	1,080	_____	1,090
40.	360	_____	350
41.	1,790	_____	1,780
42.	400	_____	390
43.	1,840	_____	1,830
44.	1,110	_____	1,100

## B

Number Correct: \_\_\_\_\_

Improvement: \_\_\_\_\_

Find the Halfway Point

1.	10	_____	20
2.	20	_____	30
3.	30	_____	40
4.	60	_____	70
5.	70	_____	60
6.	50	_____	60
7.	60	_____	50
8.	40	_____	50
9.	50	_____	40
10.	80	_____	70
11.	70	_____	80
12.	80	_____	90
13.	90	_____	100
14.	100	_____	90
15.	90	_____	80
16.	60	_____	70
17.	160	_____	170
18.	260	_____	270
19.	560	_____	570
20.	570	_____	560
21.	70	_____	80
22.	170	_____	180

23.	270	_____	280
24.	670	_____	680
25.	680	_____	670
26.	20	_____	30
27.	920	_____	930
28.	60	_____	50
29.	460	_____	450
30.	90	_____	100
31.	890	_____	900
32.	990	_____	1,000
33.	1,000	_____	1,010
34.	20	_____	30
35.	1,020	_____	1,030
36.	1,520	_____	1,530
37.	380	_____	390
38.	1,380	_____	1,390
39.	1,080	_____	1,090
40.	760	_____	750
41.	1,690	_____	1,680
42.	300	_____	290
43.	1,850	_____	1,840
44.	1,220	_____	1,210

**A**

Number Correct: \_\_\_\_\_

Round to the Nearest Ten

1.	21 ≈	
2.	31 ≈	
3.	41 ≈	
4.	81 ≈	
5.	59 ≈	
6.	49 ≈	
7.	39 ≈	
8.	19 ≈	
9.	36 ≈	
10.	34 ≈	
11.	56 ≈	
12.	54 ≈	
13.	77 ≈	
14.	73 ≈	
15.	68 ≈	
16.	62 ≈	
17.	25 ≈	
18.	35 ≈	
19.	45 ≈	
20.	75 ≈	
21.	85 ≈	
22.	15 ≈	

23.	79 ≈	
24.	89 ≈	
25.	99 ≈	
26.	109 ≈	
27.	119 ≈	
28.	149 ≈	
29.	311 ≈	
30.	411 ≈	
31.	519 ≈	
32.	619 ≈	
33.	629 ≈	
34.	639 ≈	
35.	669 ≈	
36.	969 ≈	
37.	979 ≈	
38.	989 ≈	
39.	999 ≈	
40.	1,109 ≈	
41.	1,119 ≈	
42.	3,227 ≈	
43.	5,487 ≈	
44.	7,885 ≈	

**B**

Number Correct: \_\_\_\_\_

Improvement: \_\_\_\_\_

Round to the Nearest Ten

1.	11 ≈	
2.	21 ≈	
3.	31 ≈	
4.	71 ≈	
5.	69 ≈	
6.	59 ≈	
7.	49 ≈	
8.	19 ≈	
9.	26 ≈	
10.	24 ≈	
11.	46 ≈	
12.	44 ≈	
13.	87 ≈	
14.	83 ≈	
15.	78 ≈	
16.	72 ≈	
17.	15 ≈	
18.	25 ≈	
19.	35 ≈	
20.	75 ≈	
21.	85 ≈	
22.	45 ≈	

23.	79 ≈	
24.	89 ≈	
25.	99 ≈	
26.	109 ≈	
27.	119 ≈	
28.	159 ≈	
29.	211 ≈	
30.	311 ≈	
31.	418 ≈	
32.	518 ≈	
33.	528 ≈	
34.	538 ≈	
35.	568 ≈	
36.	968 ≈	
37.	978 ≈	
38.	988 ≈	
39.	998 ≈	
40.	1,108 ≈	
41.	1,118 ≈	
42.	2,337 ≈	
43.	4,578 ≈	
44.	8,785 ≈	

**A**

Number Correct: \_\_\_\_\_

Round to the Nearest Hundred

1.	201 ≈	
2.	301 ≈	
3.	401 ≈	
4.	801 ≈	
5.	1,801 ≈	
6.	2,801 ≈	
7.	3,801 ≈	
8.	7,801 ≈	
9.	290 ≈	
10.	390 ≈	
11.	490 ≈	
12.	890 ≈	
13.	1,890 ≈	
14.	2,890 ≈	
15.	3,890 ≈	
16.	7,890 ≈	
17.	512 ≈	
18.	2,512 ≈	
19.	423 ≈	
20.	3,423 ≈	
21.	677 ≈	
22.	4,677 ≈	

23.	350 ≈	
24.	1,350 ≈	
25.	450 ≈	
26.	5,450 ≈	
27.	850 ≈	
28.	6,850 ≈	
29.	649 ≈	
30.	651 ≈	
31.	691 ≈	
32.	791 ≈	
33.	891 ≈	
34.	991 ≈	
35.	995 ≈	
36.	998 ≈	
37.	9,998 ≈	
38.	7,049 ≈	
39.	4,051 ≈	
40.	8,350 ≈	
41.	3,572 ≈	
42.	9,754 ≈	
43.	2,915 ≈	
44.	9,996 ≈	

**B**

Number Correct: \_\_\_\_\_

Improvement: \_\_\_\_\_

Round to the Nearest Hundred

1.	101 ≈	
2.	201 ≈	
3.	301 ≈	
4.	701 ≈	
5.	1,701 ≈	
6.	2,701 ≈	
7.	3,701 ≈	
8.	8,701 ≈	
9.	190 ≈	
10.	290 ≈	
11.	390 ≈	
12.	790 ≈	
13.	1,790 ≈	
14.	2,790 ≈	
15.	3,790 ≈	
16.	8,790 ≈	
17.	412 ≈	
18.	2,412 ≈	
19.	523 ≈	
20.	3,523 ≈	
21.	877 ≈	
22.	4,877 ≈	

23.	250 ≈	
24.	1,250 ≈	
25.	350 ≈	
26.	5,350 ≈	
27.	750 ≈	
28.	6,750 ≈	
29.	649 ≈	
30.	652 ≈	
31.	692 ≈	
32.	792 ≈	
33.	892 ≈	
34.	992 ≈	
35.	996 ≈	
36.	999 ≈	
37.	9,999 ≈	
38.	4,049 ≈	
39.	2,051 ≈	
40.	7,350 ≈	
41.	4,572 ≈	
42.	8,754 ≈	
43.	3,915 ≈	
44.	9,997 ≈	

# Exit Ticket Packet

Name \_\_\_\_\_

Date \_\_\_\_\_

The table to the right shows how much time it takes each of the 5 students to do 15 jumping jacks.

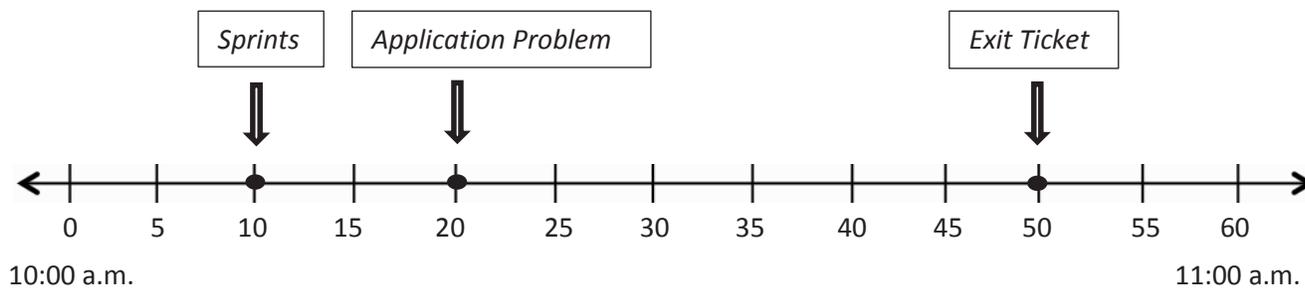
<b>Maya</b>	<b>16 seconds</b>
<b>Riley</b>	<b>15 seconds</b>
<b>Jake</b>	<b>14 seconds</b>
<b>Nicholas</b>	<b>15 seconds</b>
<b>Adeline</b>	<b>17 seconds</b>

- a. Who finished 15 jumping jacks the fastest?
- b. Who finished their jumping jacks in the exact same amount of time?
- c. How many seconds faster did Jake finish than Adeline?

Name \_\_\_\_\_

Date \_\_\_\_\_

The number line below shows a math class that begins at 10:00 a.m. and ends at 11:00 a.m. Use the number line to answer the following questions.



10:00 a.m.

11:00 a.m.

- What time do Sprints begin?
- What time do students begin the Application Problem?
- What time do students work on the Exit Ticket?
- How long is math class?

Name \_\_\_\_\_

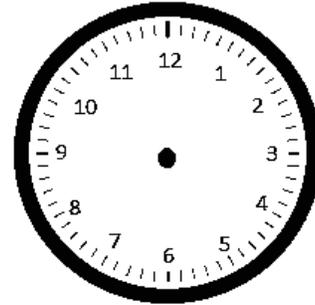
Date \_\_\_\_\_

The clock shows what time Jason gets to school in the morning.

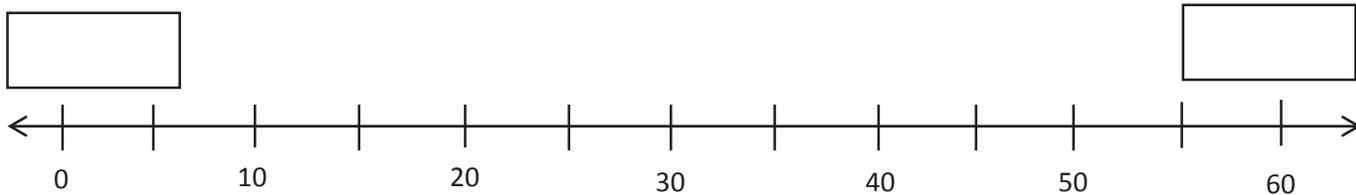
*Arrival at School*

- a. What time does Jason get to school?

- b. The first bell rings at 8:23 a.m. Draw hands on the clock to show when the first bell rings.

*First Bell Rings*

- c. Label the first and last tick marks 8:00 a.m. and 9:00 a.m. Plot a point to show when Jason arrives at school. Label it *A*. Plot a point on the line when the first bell rings and label it *B*.

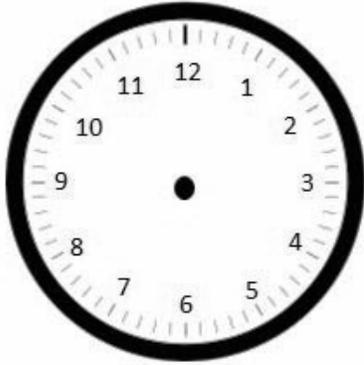


Name \_\_\_\_\_

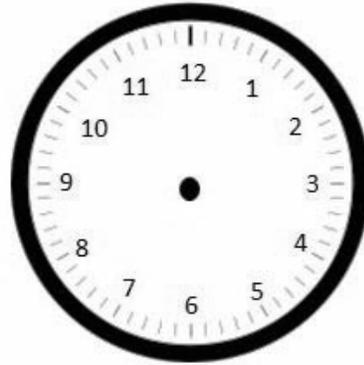
Date \_\_\_\_\_

Independent reading time starts at 1:34 p.m. It ends at 1:56 p.m.

1. Draw the start time on the clock below.



2. Draw the end time on the clock below.



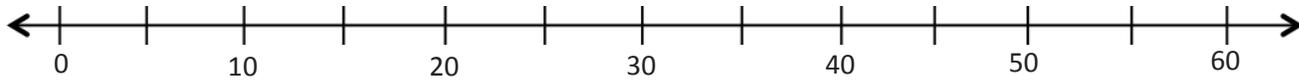
3. How many minutes does independent reading time last?

Name \_\_\_\_\_ Date \_\_\_\_\_

Michael spends 19 minutes on his math homework and 17 minutes on his science homework.

How many minutes does Michael spend doing his homework?

Model the problem on the number line, and write an equation to solve.



Michael spends \_\_\_\_\_ minutes on his homework.

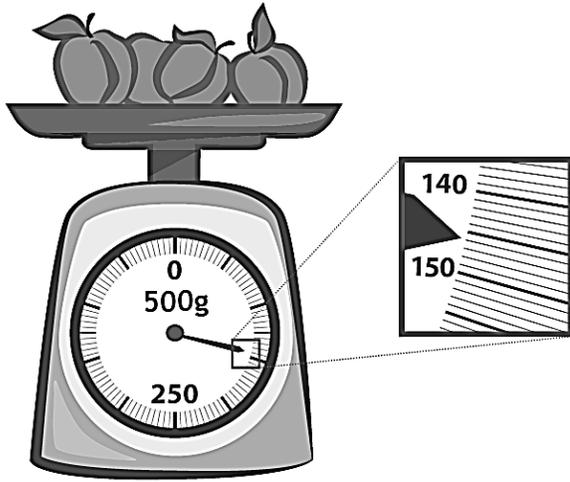
Name \_\_\_\_\_ Date \_\_\_\_\_

Ten bags of sugar weigh 1 kilogram. How many grams does each bag of sugar weigh?

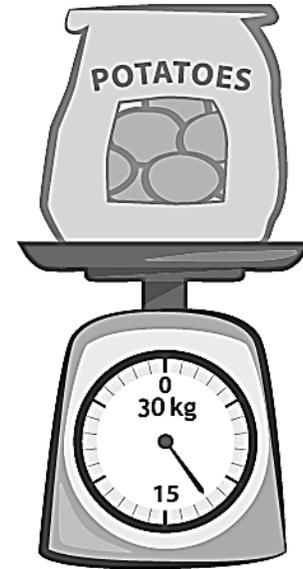
Name \_\_\_\_\_

Date \_\_\_\_\_

1. Read and write the weights below. Write the word *kilogram* or *gram* with the measurement.



\_\_\_\_\_



\_\_\_\_\_

2. Circle the correct unit of weight for each estimation.
- An orange weighs about 200 (grams / kilograms).
  - A basketball weighs about 624 (grams / kilograms).
  - A brick weighs about 2 (grams / kilograms).
  - A small packet of sugar weighs about 4 (grams / kilograms).
  - A tiger weighs about 190 (grams / kilograms).

Name \_\_\_\_\_

Date \_\_\_\_\_

The weights of a backpack and suitcase are shown below.



7 kg



21 kg

- How much heavier is the suitcase than the backpack?
- What is the total weight of 4 identical backpacks?
- How many backpacks weigh the same as one suitcase?

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Morgan fills a 1-liter jar with water from the pond. She uses a 100-milliliter cup to scoop water out of the pond and pour it into the jar. How many times will Morgan scoop water from the pond to fill the jar?

2. How many groups of 10 milliliters are in 1 liter? Explain.

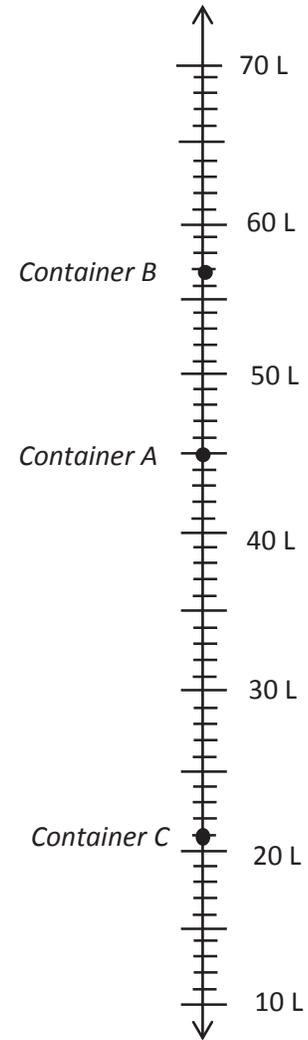
There are \_\_\_\_\_ groups of 10 milliliters in 1 liter.

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Use the number line to record the capacity of the containers.

Container	Capacity in Liters
A	
B	
C	



2. What is the difference between the capacity of Container A and Container C?

Name \_\_\_\_\_

Date \_\_\_\_\_

The capacities of three cups are shown below.



*Cup A*  
160 mL



*Cup B*  
280 mL



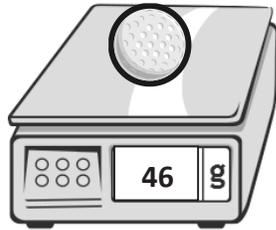
*Cup C*  
237 mL

- Find the total capacity of the three cups.
- Bill drinks exactly half of Cup B. How many milliliters are left in Cup B?
- Anna drinks 3 cups of tea from Cup A. How much tea does she drink in total?

Name \_\_\_\_\_

Date \_\_\_\_\_

The weight of a golf ball is shown below.



- The golf ball weighs \_\_\_\_\_.
- Round the weight of the golf ball to the nearest ten grams. Model your thinking on the number line.
- The golf ball weighs about \_\_\_\_\_.
- Explain how you used the halfway point on the number line to round to the nearest ten grams.

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Round to the nearest ten. Use the number line to model your thinking.

a. $26 \approx$ _____ 	b. $276 \approx$ _____ 
--	---

2. Bobby rounds 603 to the nearest ten. He says it is 610. Is he correct? Why or why not? Use a number line and words to explain your answer.

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Round to the nearest hundred. Use the number line to model your thinking.

a. $137 \approx$ _____	b. $1,761 \approx$ _____
------------------------	--------------------------



2. There are 685 people at the basketball game. Draw a vertical number line to round the number of people to the nearest hundred people.

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Find the sums below. Choose mental math or the algorithm.

a.  $24 \text{ cm} + 36 \text{ cm}$

b.  $562 \text{ m} + 180 \text{ m}$

c.  $345 \text{ km} + 239 \text{ km}$

2. Brianna jogs 15 minutes more on Sunday than Saturday. She jogged 26 minutes on Saturday.

a. How many minutes does she jog on Sunday?

b. How many minutes does she jog in total?

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Find the sums.

a.  $78 \text{ g} + 29 \text{ g}$

b.  $328 \text{ kg} + 289 \text{ kg}$

c.  $509 \text{ L} + 293 \text{ L}$

2. The third-grade class sells lemonade to raise funds. After selling 58 liters of lemonade in 1 week, they still have 46 liters of lemonade left. How many liters of lemonade did they have at the beginning?

Name \_\_\_\_\_ Date \_\_\_\_\_

Jesse practices the trumpet for a total of 165 minutes during the first week of school. He practices for 245 minutes during the second week.

a. Estimate the total amount of time Jesse practices by rounding to the nearest 10 minutes.

b. Estimate the total amount of time Jesse practices by rounding to the nearest 100 minutes.

c. Explain why the estimates are so close to each other.

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Solve the subtraction problems below.

a.  $381 \text{ mL} - 146 \text{ mL}$

b.  $730 \text{ m} - 426 \text{ m}$

c.  $509 \text{ kg} - 384 \text{ kg}$

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?



Name \_\_\_\_\_

Date \_\_\_\_\_

1. Solve the subtraction problems below.

a.  $346 \text{ m} - 187 \text{ m}$

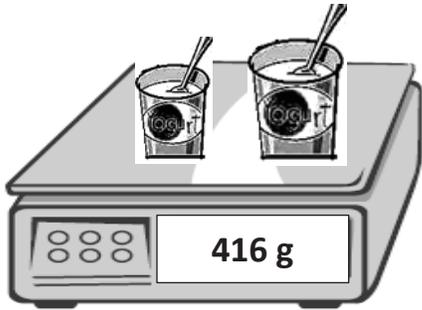
b.  $700 \text{ kg} - 592 \text{ kg}$

2. The farmer's sheep weighs 647 kilograms less than the farmer's cow. The cow weighs 725 kilograms. How much does the sheep weigh?

Name \_\_\_\_\_

Date \_\_\_\_\_

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

- Estimate how many grams are in the small cup of yogurt by rounding.
- Estimate how many grams are in the small cup of yogurt by rounding in a different way.
- How many grams are actually in the small cup of yogurt?
- Is your answer reasonable? Which estimate was closer to the exact weight? Explain why.



# Assessment Packet

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Fatima runs errands.

- a. The clock to the right shows what time she leaves home. What time does she leave?

*Fatima leaves home.*

- b. It takes Fatima 17 minutes to go from her home to the market. Use the number line below to show what time she gets to the market.

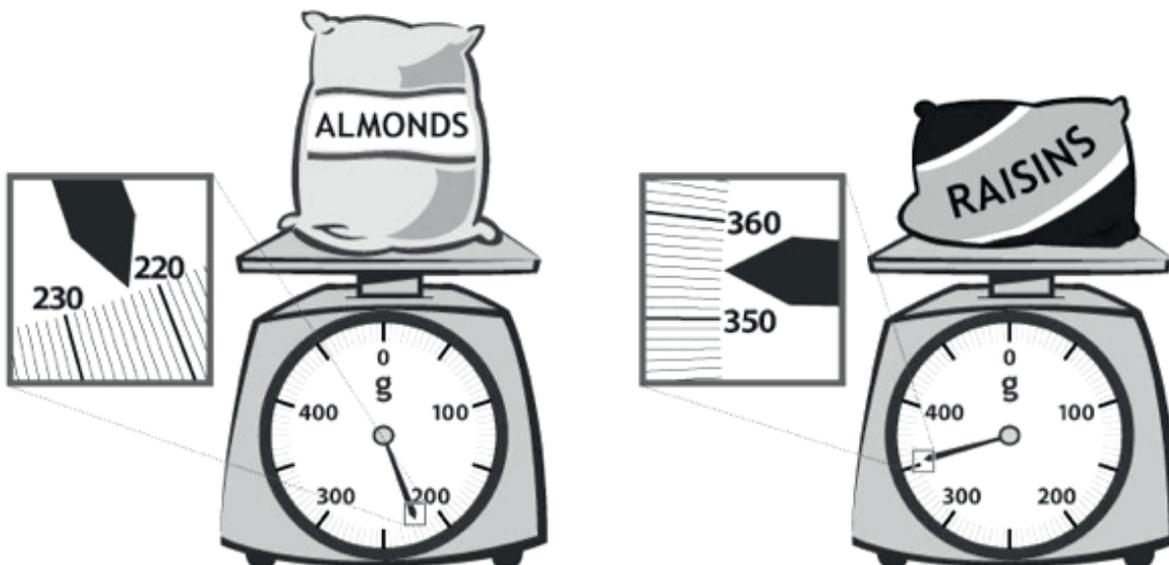


- c. The clock to the right shows what time Fatima leaves the market. What time does she leave the market?

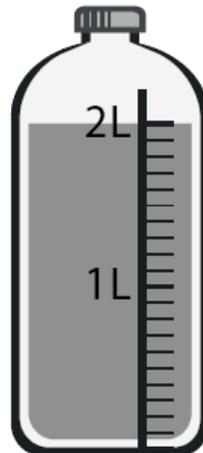
*Fatima leaves the market.*

- d. How long does Fatima spend at the market?

2. At the market, Fatima uses a scale to weigh a bag of almonds and a bag of raisins, shown below. What is the total weight of the almonds and raisins?



3. The amount of juice in 1 bottle is shown to the right. Fatima needs 18 liters for a party. Draw and label a tape diagram to find how many bottles of juice she should buy.

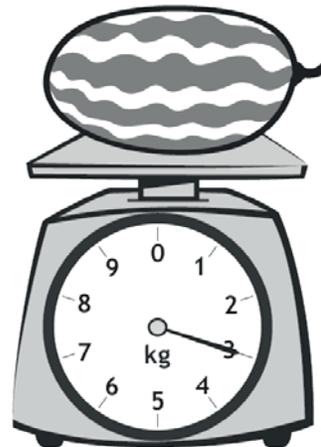


4. Altogether, Fatima's lettuce, broccoli, and peas weigh 968 grams. The total weight of her lettuce and broccoli is shown to the right. Write and solve a number sentence to find how much the peas weigh.



5. Fatima weighs a watermelon, shown to the right.

a. How much does the watermelon weigh?



b. Leaving the store Fatima thinks, "Each bag of groceries seems as heavy as a watermelon!" Use Fatima's idea about the weight of the watermelon to estimate the total weight of 7 bags.

c. The grocer helps carry about 9 kilograms. Fatima carries the rest. Estimate how many kilograms of groceries Fatima carries.

d. It takes Fatima 12 minutes to drive to the bank after she leaves the store and then 34 more minutes to drive home. How many minutes does Fatima drive after she leaves the store?

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Paul is moving to Australia. The total weight of his 4 suitcases is shown on the scale to the right. On a number line, round the total weight to the nearest 100 kilograms.



2. Paul buys snacks for his flight. He compares cashews to yogurt raisins. The cashews weigh 205 grams, and the yogurt raisins weigh 186 grams. What is the difference between the weight of the cashews and yogurt raisins?

3. The clock to the right shows what time it is now.
- a. Estimate the time to the nearest 10 minutes.

*Time Right Now*

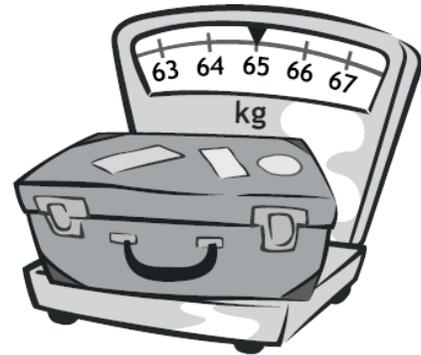
- b. The clock to the right show Paul's departure time. Estimate the time to the nearest 10 minutes.

*Departure Time*

- c. Use your answers from Parts (a) and (b) to estimate how long Paul has before his flight leaves.

4. A large airplane uses about 256 liters of fuel every minute.
- Round to the nearest ten liters to estimate how many liters of fuel get used every minute.
  - Use your estimate to find about how many liters of fuel are used every 2 minutes.
  - Calculate precisely how many liters of fuel are used every 2 minutes.
  - Draw a tape diagram to find the difference between your estimate and the precise calculation.

5. Baggage handlers lift heavy luggage into the plane. The weight of one bag is shown on the scale to the right.

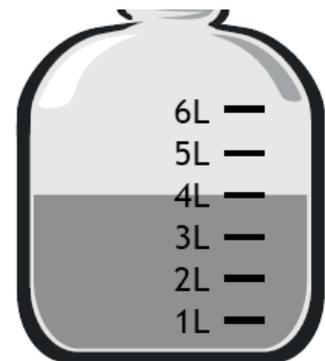


a. One baggage handler lifts 3 bags of the same weight. Round to estimate the total weight he lifts. Then, calculate exactly.

b. Another baggage handler lifts luggage that weighs a total of 200 kilograms. Write and solve an equation to show how much more weight he lifts than the first handler in Part (a).

c. The baggage handlers load luggage for 18 minutes. If they start at 10:25 p.m., what time do they finish?

d. One baggage handler drinks the amount of water shown below every day at work. How many liters of water does he drink during all 7 days of the week?



6. Complete as many problems as you can in 100 seconds. The teacher will time you and tell you when to stop.

$3 \times 1 = \underline{\quad\quad\quad}$      $2 \div 1 = \underline{\quad\quad\quad}$      $\underline{\quad\quad\quad} = 20 \div 10$      $2 \times 2 = \underline{\quad\quad\quad}$      $5 \times \underline{\quad\quad\quad} = 10$

$\underline{\quad\quad\quad} \times 2 = 4$      $10 \div 5 = \underline{\quad\quad\quad}$      $10 \times \underline{\quad\quad\quad} = 30$      $\underline{\quad\quad\quad} = 2 \times 3$      $\underline{\quad\quad\quad} = 12 \div 4$

$4 \times 3 = \underline{\quad\quad\quad}$      $15 \div 5 = \underline{\quad\quad\quad}$      $\underline{\quad\quad\quad} \times 4 = 16$      $\underline{\quad\quad\quad} = 40 \div 10$      $2 \times 4 = \underline{\quad\quad\quad}$

$3 \times 4 = \underline{\quad\quad\quad}$      $4 \times \underline{\quad\quad\quad} = 12$      $20 \div 4 = \underline{\quad\quad\quad}$      $\underline{\quad\quad\quad} = 10 \times 5$      $\underline{\quad\quad\quad} \times 5 = 25$

$4 \times \underline{\quad\quad\quad} = 20$      $\underline{\quad\quad\quad} = 10 \div 2$      $\underline{\quad\quad\quad} \times 3 = 18$      $10 \times 6 = \underline{\quad\quad\quad}$      $30 \div 5 = \underline{\quad\quad\quad}$

$3 \times 6 = \underline{\quad\quad\quad}$      $\underline{\quad\quad\quad} = 24 \div 4$      $5 \times \underline{\quad\quad\quad} = 35$      $\underline{\quad\quad\quad} = 10 \times 7$      $14 \div 2 = \underline{\quad\quad\quad}$

$2 \times 7 = \underline{\quad\quad\quad}$      $\underline{\quad\quad\quad} \times 4 = 28$      $\underline{\quad\quad\quad} = 40 \div 5$      $10 \times \underline{\quad\quad\quad} = 80$      $\underline{\quad\quad\quad} = 3 \times 8$

$24 \div 3 = \underline{\quad\quad\quad}$      $80 \div 10 = \underline{\quad\quad\quad}$      $36 \div 4 = \underline{\quad\quad\quad}$      $5 \times 9 = \underline{\quad\quad\quad}$      $2 \times \underline{\quad\quad\quad} = 18$