

## Lesson 10 Practice Problems

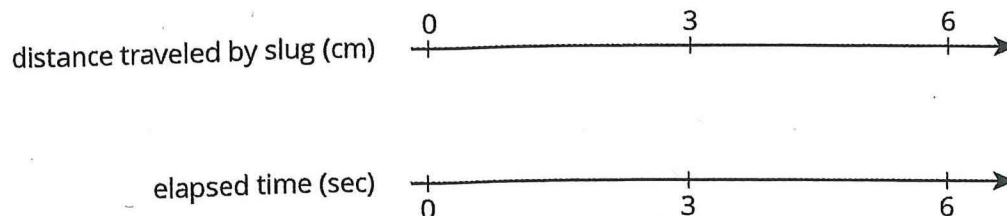
### Problem 1

A slug travels 3 centimeters in 3 seconds. A snail travels 6 centimeters in 6 seconds. Both travel at constant speeds. Mai says, "The snail was traveling faster because it went a greater distance." Do you agree with Mai? Explain or show your reasoning.

### Possible Solutions

Answers vary. Sample responses:

- I disagree. The slug and the snail are both traveling 1 centimeter per second. They are traveling at the same speed.
- I disagree. The double number line for the slug shows that in 6 seconds it also travels 6 centimeters.



### Problem 2

If you blend 2 scoops of chocolate ice cream with 1 cup of milk, you get a milkshake with a stronger chocolate flavor than if you blended 3 scoops of chocolate ice cream with 2 cups of milk. Explain or show why.

### Possible Solutions

Answers vary. Sample responses:

- 3 scoops of chocolate ice cream with 2 cups of milk is 1.5 scoops of chocolate ice cream per cup of milk. This is less chocolate ice cream per cup of milk than in the first mixture (2 scoops of chocolate ice cream per cup of milk), so the first mixture has stronger chocolate flavor.
- 2 scoops of chocolate ice cream with 1 cup of milk will taste the same as 4 scoops of chocolate ice cream with 2 cups of milk. This mixture has an extra scoop of chocolate ice cream so will taste more chocolaty than 3 scoops of chocolate ice cream and 2 cups of milk.



### Problem 3

There are 2 mixtures of light purple paint.

- Mixture A is made with 5 cups of purple paint and 2 cups of white paint.
- Mixture B is made with 15 cups of purple paint and 8 cups of white paint.

Which mixture is a lighter shade of purple? Explain your reasoning.

### Possible Solutions

Mixture B is lighter. Explanations vary. Sample responses:

- Mixture A contains 2.5 cups of purple paint per cup of white paint. Mixture B contains only 1.875 cups of purple paint per cup of white paint. Less purple paint for the same amount of white paint will result in a lighter shade of purple.
- The ratio of purple paint to white paint in Mixture A is 5 : 2. The ratio of purple paint to white paint in Mixture B is 15 : 8. The amount of purple paint in Mixture B is 3 times the amount of Mixture A, but the amount of white paint in B is 4 times the amount of A.

### Problem 4

Tulip bulbs are on sale at store A, at 5 for \$11.00, and the regular price at store B is 6 for \$13. Is each store pricing tulip bulbs at the same rate? Explain how you know.

### Possible Solutions

No. Explanations vary. Sample response: At store A, 30 bulbs would cost \$66, but at store B, 30 bulbs would cost \$65.

### Problem 5

From Grade 6, Unit 2, Lesson 9

A plane travels at a constant speed. It takes 6 hours to travel 3,360 miles.

- What is the plane's speed in miles per hour?
- At this rate, how many miles can it travel in 10 hours?

### Possible Solutions

- 560 because  $3,360 \div 6 = 560$ .
- In 10 hours, it can travel 5,600 miles because  $10 \cdot 560 = 5,600$ .

## Lesson 10 Practice Problems

### Problem 6

From Grade 6, Unit 2, Lesson 8

A pound of ground beef costs \$5. At this rate, what is the cost of:

- a. 3 pounds?
- b.  $\frac{1}{2}$  pound?
- c.  $\frac{1}{4}$  pound?
- d.  $\frac{3}{4}$  pound?
- e.  $3\frac{3}{4}$  pounds?

### Possible Solutions

- a. \$15 (because  $5 \cdot 3 = 15$ )
- b. \$2.50 (because  $\frac{1}{2} \cdot 5 = 2\frac{1}{2}$ )
- c. \$1.25 (because  $\frac{1}{4} \cdot 5 = 1\frac{1}{4}$ )
- d. \$3.75 (three times the cost of  $\frac{1}{4}$  pound)
- e. \$18.75 (the total cost of 3 pounds and  $\frac{3}{4}$  pound)

### Problem 7

From Grade 6, Unit 2, Lesson 7

In a triple batch of a spice mix, there are 6 teaspoons of garlic powder and 15 teaspoons of salt. Answer the following questions about the mix. If you get stuck, create a double number line.

- a. How much garlic powder is used with 5 teaspoons of salt?
- b. How much salt is used with 8 teaspoons of garlic powder?
- c. If there are 14 teaspoons of spice mix, how much salt is in it?
- d. How much more salt is there than garlic powder if 6 teaspoons of garlic powder are used?

### Possible Solutions

- a. 2 teaspoons
- b. 20 teaspoons
- c. 10 teaspoons
- d. 9 teaspoons

## Lesson 11 Practice Problems

### Problem 1

Complete the table to show the amounts of yellow and red paint needed for different-sized batches of the same shade of orange paint.

yellow paint (quarts)	red paint (quarts)
5	6

Explain how you know that these amounts of yellow paint and red paint will make the same shade of orange as the mixture in the first row of the table.

### Possible Solutions

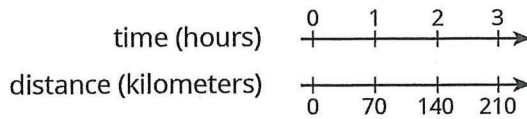
Answers vary. Sample response:

yellow paint (quarts)	red paint (quarts)
5	6
$\frac{5}{4}$	$\frac{3}{2}$ or equivalent
$\frac{5}{2}$	3 or equivalent
$\frac{15}{4}$	$\frac{9}{2}$ or equivalent

Each row is a multiple of the first row.

**Problem 2**

A car travels at a constant speed, as shown on the double number line.



How far does the car travel in 14 hours? Explain or show your reasoning.

**Possible Solutions**

980 kilometers. Possible strategy: Make a table because there isn't enough room to continue the double number line that far.

time (hours)	distance (kilometers)
1	70
2	140
3	210
4	980

**Problem 3**

The olive trees in an orchard produce 3,000 pounds of olives a year. It takes 20 pounds of olives to make 3 liters of olive oil. How many liters of olive oil can this orchard produce in a year? If you get stuck, consider using the table.

olives (pounds)	olive oil (liters)
20	3
100	
3,000	

**Possible Solutions**

The orchard produces 450 liters of olive oil per year. Possible strategy:

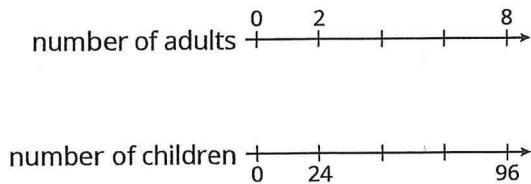
## Lesson 11 Practice Problems

olives (pounds)	olive oil (liters)
20	3
100	15
3,000	450

### Problem 4

From Grade 6, Unit 2, Lesson 6

At a school recess, there needs to be a ratio of 2 adults for every 24 children on the playground. The double number line represents the number of adults and children on the playground at recess.



- Label each remaining tick mark with its value.
- How many adults are needed if there are 72 children? Circle your answer on the double number line.

### Possible Solutions

- Adults: 0, 2, 4, 6, 8. Children: 0, 24, 48, 72, 96.
- 6 adults. The portion of the double number line at 6 adults and 72 children is circled.

### Problem 5

From Grade 6, Unit 2, Lesson 10

While playing basketball, Jada's heart rate goes up to 160 beats per minute. While jogging, her heart beats 25 times in 10 seconds. Assuming her heart beats at a constant rate while jogging, which of these activities resulted in a higher heart rate? Explain your reasoning.

### Possible Solutions

Playing basketball. Sample explanation: 25 times in 10 seconds means 150 heartbeats per minute ( $25 \cdot 6 = 150$ ). 150 beats per minute is lower than 160 beats per minute, so Jada's heart rate is lower when she goes jogging than when she plays basketball.

### Problem 6

From Grade 6, Unit 2, Lesson 8

A shopper bought the following items at the farmer's market:

- a. 6 ears of corn for \$1.80. What was the cost per ear?
- b. 12 apples for \$2.88. What was the cost per apple?
- c. 5 tomatoes for \$3.10. What was the cost per tomato?

**Possible Solutions**

- a. \$0.30
- b. \$0.24
- c. \$0.62

## Lesson 12 Practice Problems

### Problem 1

Priya collected 2,400 grams of pennies in a fundraiser. Each penny has a mass of 2.5 grams. How much money did Priya raise? If you get stuck, consider using the table.

number of pennies	mass in grams
1	2.5
	2,400

### Possible Solutions

\$9.60. Possible strategy:

number of pennies	mass in grams
1	2.5
1,000	2,500
4	10
40	100
960	2,400



## Lesson 12 Practice Problems

### Problem 2

Kiran reads 5 pages in 20 minutes. He spends the same amount of time per page. How long will it take him to read 11 pages? If you get stuck, consider using the table.

time in minutes	number of pages
20	5
	1
	11

### Possible Solutions

44 minutes

time in minutes	number of pages
20	5
4	1
44	11

### Problem 3

Mai is making personal pizzas. For 4 pizzas, she uses 10 ounces of cheese.

number of pizzas	ounces of cheese
4	10

a. How much cheese does Mai use per pizza?

b. At this rate, how much cheese will she need to make 15 pizzas?

### Possible Solutions

Mai uses 2.5 ounces of cheese per pizza, because  $10 \div 4 = 2.5$ . She will need 37.5 ounces of cheese for 15 pizzas, because  $2.5 \cdot 15 = 37.5$ .

**Problem 4**

Clare is paid \$90 for 5 hours of work. At this rate, how many seconds does it take for her to earn 25 cents?

**Possible Solutions**

Clare earns 25 cents every 50 seconds. She earns \$18 per hour, and an hour has 3,600 seconds. \$18 is 72 quarters, and  $3,600 \div 72 = 50$ .

**Problem 5**

From Grade 6, Unit 2, Lesson 10

A car that travels 20 miles in  $\frac{1}{2}$  hour at constant speed is traveling at the same speed as a car that travels 30 miles in  $\frac{3}{4}$  hour at a constant speed. Explain or show why.

**Possible Solutions** /

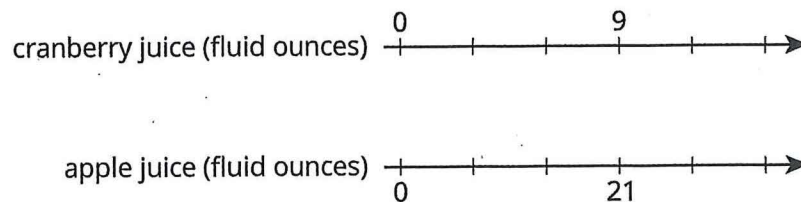
Answers vary. Sample responses:

- Both cars go 10 miles in  $\frac{1}{4}$  of an hour so they are traveling at the same speed.
- In 1 hour, both cars travel 40 miles so they are both traveling at the same speed.

**Problem 6**

From Grade 6, Unit 2, Lesson 6

Lin makes her favorite juice blend by mixing cranberry juice with apple juice in the ratio shown on the double number line. Complete the diagram to show smaller and larger batches that would taste the same as Lin's favorite blend.

**Possible Solutions**

Cranberry (cups): 0, 3, 6, 9, 12, 15. Apple (cups): 0, 7, 14, 21, 28, 35

**Problem 7**

From Grade 6, Unit 2, Lesson 5

## Lesson 12 Practice Problems

Each of these is a pair of equivalent ratios. For each pair, explain why they are equivalent ratios or draw a representation that shows why they are equivalent ratios.

- $600 : 450$  and  $60 : 45$
- $60 : 45$  and  $4 : 3$
- $600 : 450$  and  $4 : 3$

### Possible Solutions

Answers vary. Sample response:

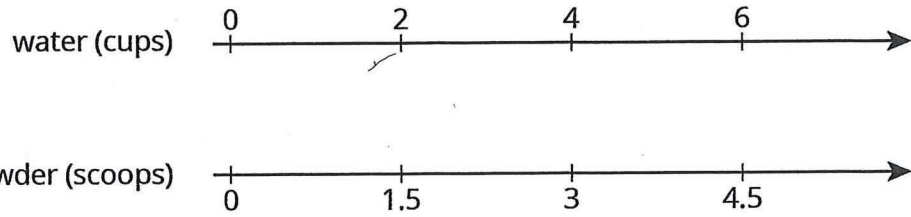
- $60 \cdot 10 = 600$  and  $45 \cdot 10 = 450$ .
- Multiplying 4 and 3 by 15 gives 60 and 45.
- Multiply 4 by 150 to get 600 and multiply 3 by 150 to get 450. Or use problems 4 and 5 together: problem 4 shows that  $600 : 450$  is equivalent to  $60 : 45$  and problem 5 shows that  $60 : 45$  is equivalent to  $4 : 3$ . This means that  $600 : 450$  is equivalent to  $4 : 3$ .



## Lesson 13 Practice Problems

### Problem 1

The double number line shows how much water and how much lemonade powder to mix to make different amounts of lemonade.



Make a table that represents the same situation.

### Possible Solutions

water (cups)	lemonade powder (scoops)
0	0
2	1.5
4	3
6	4.5

## Lesson 13 Practice Problems

### Problem 2

A bread recipe uses 3 tablespoons of olive oil for every 2 cloves of crushed garlic.

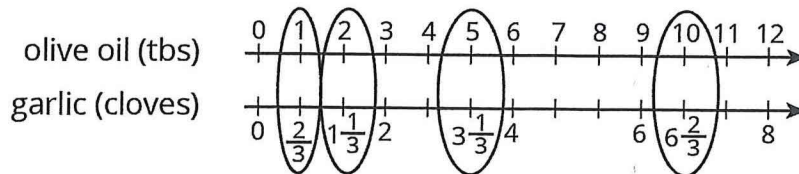
- Complete the table to show different-sized batches of bread that taste the same as the recipe.
- Draw a double number line that represents the same situation.
- Which representation do you think works better in this situation? Explain why.

olive oil (tablespoons)	crushed garlic (cloves)
3	2
1	
2	
5	
10	

### Possible Solutions

a.

olive oil (tablespoons)	crushed garlic (cloves)
3	2
1	$\frac{2}{3}$
2	$1\frac{1}{3}$
5	$3\frac{1}{3}$
10	$6\frac{2}{3}$

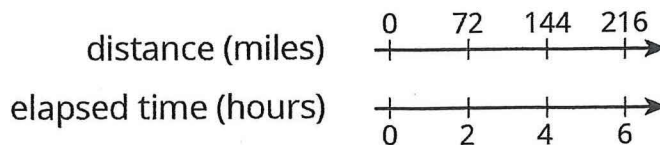


b.

- Answers vary. Sample response: The table is more convenient because the rows of the table can be listed in any order and without worrying about placing numbers accurately on the number line.

**Problem 3**

Clare travels at a constant speed, as shown on the double number line.



At this rate, how far does she travel in each of these intervals of time? Explain or show your reasoning. If you get stuck, consider using a table.

- a. 1 hour
- b. 3 hours
- c. 6.5 hours

**Possible Solutions**

Explanations vary. Sample responses:

- a. 36 miles. 1 hour is half of 2 hours, so half of 72 is 36. She traveled 36 miles in 1 hour.
- b. 108 miles. Since the rate is 36 miles per hour, to find her distance in 3 hours, multiply 36 by 3. She traveled 108 miles in 3 hours.
- c. 234 miles. Multiply the rate by 6.5. She traveled 234 miles in 6.5 hours.

distance (miles)	elapsed time (hours)
72	2
36	1
108	3
234	6.5

**Problem 4**

From Grade 6, Unit 2, Lesson 9

Lin and Diego travel in cars on the highway at constant speeds. In each case, decide who was traveling faster and explain how you know.

- a. During the first half hour, Lin travels 23 miles while Diego travels 25 miles.

## Lesson 13 Practice Problems

- b. After stopping for lunch, they travel at different speeds. To travel the next 60 miles, it takes Lin 65 minutes and it takes Diego 70 minutes.

### Possible Solutions

Explanations vary. Sample response:

- a. Diego traveled faster because he covered more distance than Lin in the same amount of time.  
b. Lin traveled faster because she covered the same distance as Diego but in less time.

### Problem 5

From Grade 6, Unit 2, Lesson 3

A sports drink recipe calls for  $\frac{5}{3}$  tablespoons of powdered drink mix for every 12 ounces of water. How many batches can you make with 5 tablespoons of drink mix and 36 ounces of water? Explain your reasoning.

### Possible Solutions

3 batches. Each batch has  $\frac{5}{3}$  tablespoons of drink mix, so 3 batches will have 5 tablespoons of drink mix, since  $3 \cdot \frac{5}{3} = 5$ . Similarly, we can make 3 batches with 36 ounces of water, since  $3 \cdot 12 = 36$ .

### Problem 6

From Grade 6, Unit 1, Lesson 18

In this cube, each small square has side length 1 unit.

- a. What is the surface area of this cube?  
b. What is the volume of this cube?



### Possible Solutions

- a. 54 square units  
b. 27 cubic units

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## Lesson 14 Practice Problems

### Problem 1

A chef is making pickles. He needs 15 gallons of vinegar. The store sells 2 gallons of vinegar for \$3.00 and allows customers to buy any amount of vinegar. Decide whether each of the following ratios correctly represents the price of vinegar.

- a. 4 gallons to \$3.00
- b. 1 gallon to \$1.50
- c. 30 gallons to \$45.00
- d. \$2.00 to 30 gallons
- e. \$1.00 to  $\frac{2}{3}$  gallon

### Possible Solutions

- a. No. (The ratio is not equivalent; 4 gallons of vinegar would cost \$6).
- b. Yes.
- c. Yes.
- d. No. (The ratio is not equivalent; 2 gallons of vinegar cost \$3, and \$30 would buy 20 gallons).
- e. Yes.

### Problem 2

A caterer needs to buy 21 pounds of pasta to cater a wedding. At a local store, 8 pounds of pasta cost \$12. How much will the caterer pay for the pasta there?

- a. Write a ratio for the given information about the cost of pasta.
- b. Would it be more helpful to write an equivalent ratio with 1 pound of pasta as one of the numbers, or with \$1 as one of the numbers? Explain your reasoning, and then write that equivalent ratio.
- c. Find the answer and explain or show your reasoning.

### Possible Solutions

- a. Answers vary. Sample responses: \$12 for every 8 pounds; \$12 to 8 pounds; 8 pounds to \$12.



## Lesson 14 Practice Problems

- b. Answers vary. Sample response: Finding 1 pound would be easier and more helpful. The cost of 1 pound can be easily found by dividing \$12 by 8 and the result (the unit rate) can be multiplied by 21. The ratio is \$1.50 to 1 pound.
- c. \$31.50. Possible reasonings:  $21 \cdot (1.50) = 31.50$ .

pasta (pounds)	cost (dollars)
8	12
1	1.50
21	31.50

### Problem 3

Lin is reading a 47-page book. She read the first 20 pages in 35 minutes.

- a. If she continues to read at the same rate, will she be able to complete this book in under 1 hour?
- b. If so, how much time will she have left? If not, how much more time is needed? Explain or show your reasoning.

### Possible Solutions

No, it will take Lin 82.25 minutes to finish her book. Possible strategies:

- a. Using a table:

number of pages	times in minutes
20	35
1	1.75 (or equivalent)
47	82.25 (or equivalent)

Additional 22.25 or  $22\frac{1}{4}$  minutes (or 22 minutes and 15 seconds) are needed.

- b. 40 pages will take 70 minutes, which is already more than an hour, so Lin can not finish the 47-page book in an hour.

**Problem 4**

Diego can type 140 words in 4 minutes.

- At this rate, how long will it take him to type 385 words?
- How many words can he type in 15 minutes?

If you get stuck, consider creating a table.

**Possible Solutions**

Answers vary. Sample response:

number of words	number of minutes
140	4
1	$\frac{1}{35}$
385	11
35	1
525	15

- It will take 11 minutes to type 385 words.
- He can type 525 words in 15 minutes.

**Problem 5**

From Grade 6, Unit 2, Lesson 10

A train that travels 30 miles in  $\frac{1}{3}$  hour at a constant speed is going faster than a train that travels 20 miles in  $\frac{1}{2}$  hour at a constant speed. Explain or show why.

**Possible Solutions**

Answers vary. Sample responses:

- In 1 hour, the first train will travel 90 miles, while the second train only travels 40 miles. The first train is going faster.

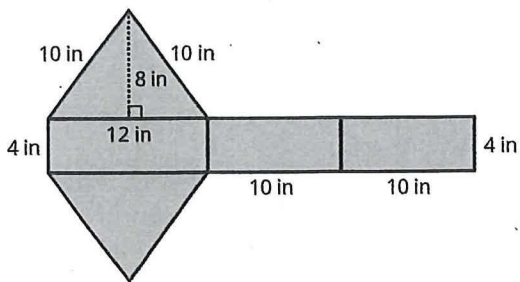
## Lesson 14 Practice Problems

- The train traveling 30 miles in  $\frac{1}{3}$  of an hour takes  $\frac{1}{9}$  of an hour to go 10 miles. The train traveling 20 miles in  $\frac{1}{2}$  of an hour takes  $\frac{1}{4}$  of an hour to go 10 miles. This means that the first train is traveling faster.

### Problem 6

From Grade 6, Unit 1, Lesson 14

Find the surface area of the polyhedron that can be assembled from this net. Show your reasoning.



### Possible Solutions

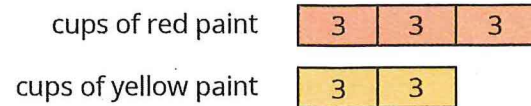
224 square inches. Reasoning varies. Sample reasoning: The three rectangular faces have areas 48, 40, and 40 square inches. Each triangle has a base of 12 inches and a height of 8 inches, so each triangle has an area of 48 square inches.  $48 + 40 + 40 + 2(48) = 224$ .

## Lesson 15 Practice Problems

### Problem 1

Here is a tape diagram representing the ratio of red paint to yellow paint in a mixture of orange paint.

- What is the ratio of yellow paint to red paint?
- How many total cups of orange paint will this mixture yield?



### Possible Solutions

- 2 : 3 (or equivalent)
- 15 cups

### Problem 2

At the kennel, the ratio of cats to dogs is 4 : 5. There are 27 animals in all. Here is a tape diagram representing this ratio.



- What is the value of each small rectangle?
- How many dogs are at the kennel?
- How many cats are at the kennel?

### Possible Solutions

- Each unit is 3, because  $4 + 5 = 9$  and  $27 \div 9 = 3$ .
- There are 15 dogs, because  $3 \cdot 5 = 15$ .
- There are 12 cats, because  $3 \cdot 4 = 12$ .

### Problem 3

Last month, there were 4 sunny days for every rainy day. If there were 30 days in the month, how

## Lesson 15 Practice Problems

many days were rainy? Explain your reasoning. If you get stuck, consider using a tape diagram.

### Possible Solutions

There were 6 rainy days, because  $4 + 1 = 5$ , so there are 5 units total.  $30 \div 5 = 6$ , so each unit is worth 6.

### Problem 4

From Grade 6, Unit 2, Lesson 12

Noah entered a 100-mile bike race. He knows he can ride 32 miles in 160 minutes. At this rate, how long will it take him to finish the race? Use each table to find the answer. Next, explain which table you think works better in finding the answer.

Table A:

distance (miles)	elapsed time (minutes)
32	160
1	
100	

Table B:

distance (miles)	elapsed time (minutes)
32	160
96	
4	
100	

### Possible Solutions

He will finish the race in 500 minutes (or equivalent).

Table A:

distance (miles)	elapsed time (minutes)
32	160
1	5
100	500

Table B:

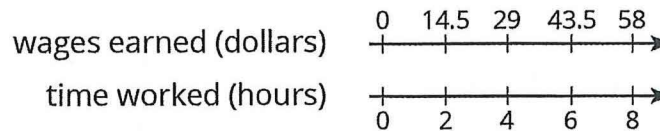
distance (miles)	elapsed time (minutes)
32	160
96	480
4	20
100	500

Answers vary. Sample response: The first table is more efficient, but they both work in getting the answer.

### Problem 5

From Grade 6, Unit 2, Lesson 13

A cashier worked an 8-hour day, and earned \$58.00. The double number line shows the amount she earned for working different numbers of hours. For each question, explain your reasoning.



- How much does the cashier earn per hour?
- How much does the cashier earn if she works 3 hours?

### Possible Solutions

- \$7.25 per hour. Possible reasoning:  $14.5 \div 2 = 7.25$
- \$21.75. Possible reasoning:  $(7.25) \cdot 3 = 21.75$

### Problem 6

From Grade 6, Unit 2, Lesson 10

A grocery store sells bags of oranges in two different sizes.

- The 3-pound bags of oranges cost \$4.
- The 8-pound bags of oranges for \$9.

## Lesson 15 Practice Problems

Which oranges cost less per pound? Explain or show your reasoning.

### Possible Solutions

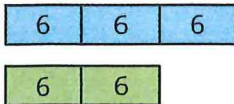
The 8-pound bags cost less per pound. Possible strategies:

- Compare the cost for 24 pounds of oranges for both types of bags. 24 pounds cost \$32 when sold in 3-pound bags. 24 pounds cost \$27 when sold in 8-pound bags.
- Compare how much can be bought for the same amount of money. \$36 can buy 27 pounds of oranges in 3-pound bags, or it can buy 32 pounds in 8-pound bags.

## Lesson 16 Practice Problems

### Problem 1

Describe a situation that could be represented with this tape diagram.



### Possible Solutions

Answers vary. Sample response: There are 30 people at a movie. The ratio of teenagers to adults is 3 to 2. There are 18 teenagers and 12 adults.

### Problem 2

There are some nickels, dimes, and quarters in a large piggy bank. For every 2 nickels there are 3 dimes. For every 2 dimes there are 5 quarters. There are 500 coins total.

- How many nickels, dimes, and quarters are in the piggy bank? Explain your reasoning.
- How much are the coins in the piggy bank worth?

### Possible Solutions

a. 80 nickels, 120 dimes, 300 quarters. Possible strategies:

- For every 2 nickels there are 3 dimes, so for every 4 nickels there are 6 dimes. For every 2 dimes there are 5 quarters, so for every 6 dimes there are 15 quarters. The ratio of nickels to dimes to quarters is 4 to 6 to 15, a total of 25 coins in the group. There are 500 coins, which means 20 groups of coins, since  $500 \div 25 = 20$ . There are 80 nickels ( $20 \cdot 4 = 80$ ), 120 dimes ( $20 \cdot 6 = 120$ ), and 300 quarters ( $20 \cdot 15 = 300$ ).
- Using a table:

nickles	dimes	quarters	total
4	6	15	25
16	24	60	100



nickles	dimes	quarters	total
80	120	300	500

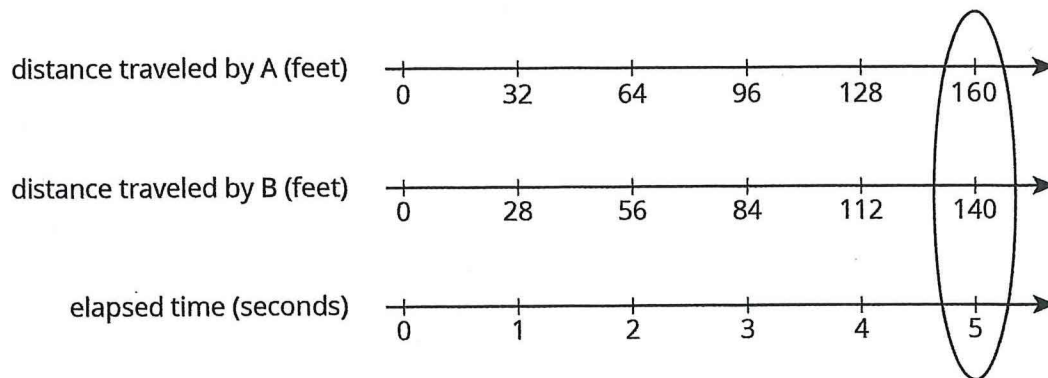
- b. \$91. The nickels are worth \$4, the dimes are worth \$12, and the quarters are worth \$75, making a total of \$91.

### Problem 3

Two horses start a race at the same time. Horse A gallops at a steady rate of 32 feet per second and Horse B gallops at a steady rate of 28 feet per second. After 5 seconds, how much farther will Horse A have traveled? Explain or show your reasoning.

### Possible Solutions

Horse A will have traveled 20 feet farther. Possible reasoning:



$$160 - 140 = 20$$

### Problem 4

From Grade 6, Unit 2, Lesson 10

Andre paid \$13 for 3 books. Diego bought 12 books priced at the same rate. How much did Diego pay for the 12 books? Explain your reasoning.

### Possible Solutions

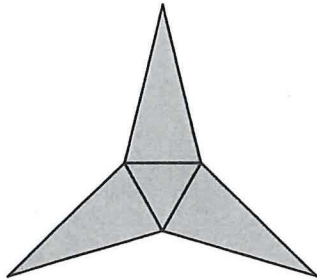
\$52. Sample explanation: 12 is 4 groups of 3 so Diego's books will cost 4 times as much as Andre's and  $4 \cdot 13 = 52$ .

## Lesson 16 Practice Problems

### Problem 5

From Grade 6, Unit 1, Lesson 15

Which polyhedron can be assembled from this net?



- A. A triangular pyramid
- B. A trapezoidal prism
- C. A rectangular pyramid
- D. A triangular prism

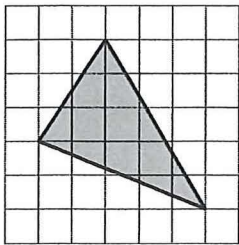
### Possible Solutions

A

### Problem 6

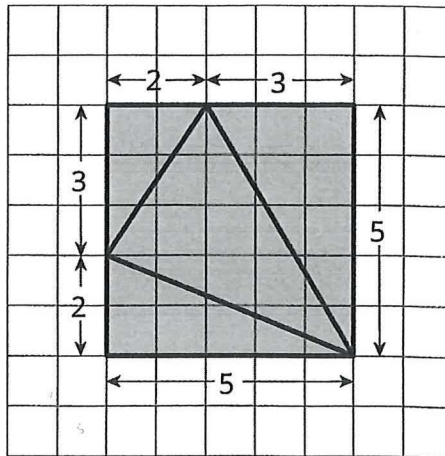
From Grade 6, Unit 1, Lesson 10

Find the area of the triangle. Show your reasoning. If you get stuck, consider drawing a rectangle around the triangle.



### Possible Solutions

9.5 square units. Explanations vary. Sample response:



Surround the triangle with a 5 by 5 unit square, which has an area of 25 square units. From the area of the square, subtract the areas of the three right triangles. The total area of the right triangles is 15.5 square units, because  $3 + 5 + 7.5 = 15.5$ . The area of the given triangle is 9.5 square units, since  $25 - 15.5 = 9.5$ .