

## Grade 7

### Math Remote Learning Assignments

#### Week 2: March 30th - April 3rd

Day	Assignments
<b>Monday</b> <b>3/30/2020</b>	<b><u>Week 2 Day 1</u></b> Part A: Watch Video & Guided Practice Part B: Solve problems Independently following the SMP Part C: Complete the Exit Ticket using <a href="#">this Illuminate link</a> Part D: Fluency Practice
<b>Tuesday</b> <b>3/31/2020</b>	<b><u>Week 2 Day 2</u></b> Part A: Watch Video & Guided Practice Part B: Solve problems Independently following the SMP Part C: Complete the Exit Ticket using <a href="#">this Illuminate link</a> Part D: Fluency Practice
<b>Wednesday</b> <b>4/1/2020</b>	<b><u>Week 2 Day 3</u></b> Part A: Watch Video & Guided Practice Part B: Solve problems Independently following the SMP Part C: Complete the Exit Ticket using <a href="#">this Illuminate link</a> Part D: Fluency Practice
<b>Thursday</b> <b>4/2/2020</b>	<b><u>Week 2 Day 4</u></b> Part A: Watch Video & Guided Practice Part B: Solve problems Independently following the SMP Part C: Complete the Exit Ticket using <a href="#">this Illuminate link</a> Part D: Fluency Practice
<b>Friday</b> <b>4/3/2020</b>	Flex Day - review your work from the week and catch up if necessary. No illuminate submission - Happy Friday!

*\*You must know your ID number in order to submit your answers in Illuminate. If you do not know your ID number, please let your teacher know and they can help you*

Grade 7 Week 2 Day 1 Assignment (3/30/20)  
Common Core Aligned Standard: 7.RP.2a

Objective: SWBAT determine if a graph or table represents a proportional relationship.

**Lesson At-A-Glance for Today**

- A. Watch Video & Guided Practice (about 10 mins)
- B. Solve problems independently following the SMP (about 25 mins)
- C. Complete the Exit Ticket (about 10 mins)
- D. Log onto IXL link (about 15 mins)

**PART A: Guided Practice** - Watch the teacher mini-lesson video and use the exemplar to follow along to complete guided practice problem.

Guided Practice Question: The number of miles travelled in a car and amount of gas spent is proportional and represented in the table below.

Miles		135		189		270		405
Gas (Gallons)	3	5	6		9		12	

Fill in the missing values and use the table and constant of proportionality to determine how many gallons of gas are needed to travel 594 miles.

Video: [Watch here](#)

Photo: [View here](#)

**Strategic Math Plan:**

1. Read and Interpret the Question
2. Make a Plan
3. Solve
4. Check your work



**PART B: Independent Practice** - Complete the following problems below using the SMP.

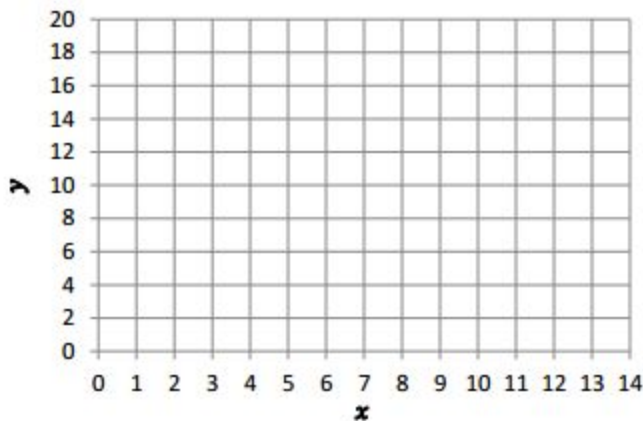
Additional Video Resources: [Khan academy Proportional Relationship graphing](#)

- 1) Raina is renting a car. When Raina asks the desk manager how much she should expect to pay to rent the car for a week, he points to the pricing chart and says that she can just look at the price per day. The chart is below.

<b>Days</b>	2	3	4	5
<b>Price</b>	\$24.00	\$51.00	\$76.00	\$100.00

Raina tells the desk manager that the sign does not have a clear unit price. The desk manager says that the pricing is proportional to the number of days the car is rented; she just needs to follow the pattern of the pricing row to find out how much it will cost her for the seven days.

Who do you agree with, Raina or the manager? Justify your response using numbers and words as well as the graph below.



- 2) To complete his expense report, the salesman had to complete the table below, showing the distance he traveled in miles and the total number of gallons used. Assume that the number of miles driven is proportional to the number of gallons consumed in order to complete the table.

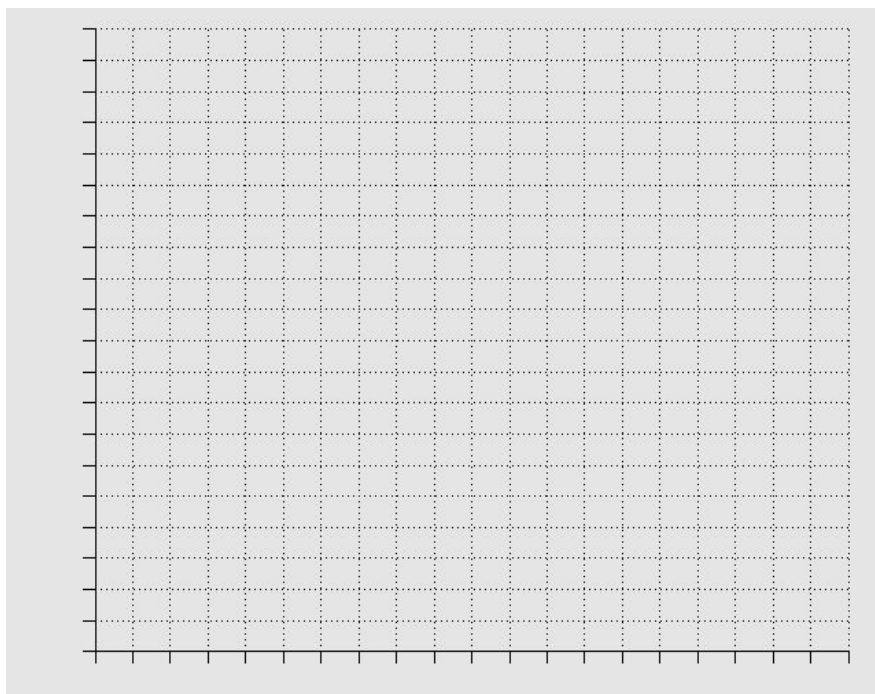
<b>Gallons Consumed</b>	2	4		8	10	12
<b>Miles Driven</b>	54		189	216		

Explain how you filled out the table in the space below.

- 3) A meteorologist wants to make predictions about how much snow will fall in a certain town. The table below represents the relationship of the amount of snowfall (in inches) in 5 counties in the town to the amount of time (in hours) of a recent winter storm.

x Time (hours)	y Snowfall (inches)
2	4
6	12
8	16
2.5	5
7	14

Can the meteorologist make an accurate prediction about how much snow will fall after 24 hours? Explain why or why not in the space below.



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**PART C: Exit Ticket** - Complete the following problems below using the SMP. Submit your answers online using [this Illuminate link](#).

- 1) The table below shows the price, in dollars, for the number of roses indicated.

Number of Roses	3	6	9	12	15
Price (Dollars)	9	18	27	36	45

Determine the cost of 2 dozen roses (1 dozen = 12 roses).

- a) 36
- b) 6
- c) 72
- d) 4

- 2) Kayla made observations about the selling price of a new brand of coffee that sold in three different-sized bags. She recorded those observations in the following table:

Ounces of Coffee	6	8	16
Price in Dollars	\$2.10	\$2.80	\$5.60

Based on her observations, which statement is **not** true?

- a) The price is proportional to the amount of coffee, because the constant of proportionality is the same for each ratio.
- b) If you spend \$4.20, you have purchased 10 oz. of coffee.
- c) A 20 oz. bag of coffee would cost \$7.
- d) The price is proportional to the amount of coffee, because there is a constant of proportionality of 0.35.

**PART D: Fluency** - Log onto IXL and complete this exercise. You may use a notebook to solve these questions and show your work.

<https://www.ixl.com/math/grade-7/identify-proportional-relationships-from-graphs-and-equations>

<https://www.ixl.com/math/grade-7/find-the-constant-of-proportionality-from-a-graph>

Grade 7 Week 2 Day 2 Assignment (3/31/20)  
Common Core Aligned Standard: 7.RP.2d

Objective: SWBAT explain what a point  $(x, y)$  on the graph of a proportional relationship means in terms of the situation, with special attention to the points  $(0, 0)$  and  $(1, r)$  where  $r$  is the unit rate.

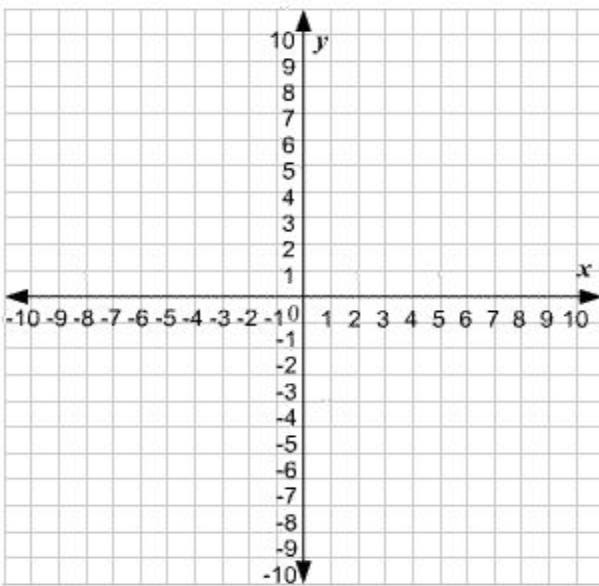
**Lesson At-A-Glance for Today**

- A. Watch Video & Guided Practice (about 10 mins)
- B. Solve problems independently following the SMP (about 25 mins)
- C. Complete the Exit Ticket (about 10 mins)
- D. Log onto IXL link (about 15 mins)

**PART A: Guided Practice** - Watch the teacher mini-lesson video and use the exemplar to follow along to complete guided practice problem.

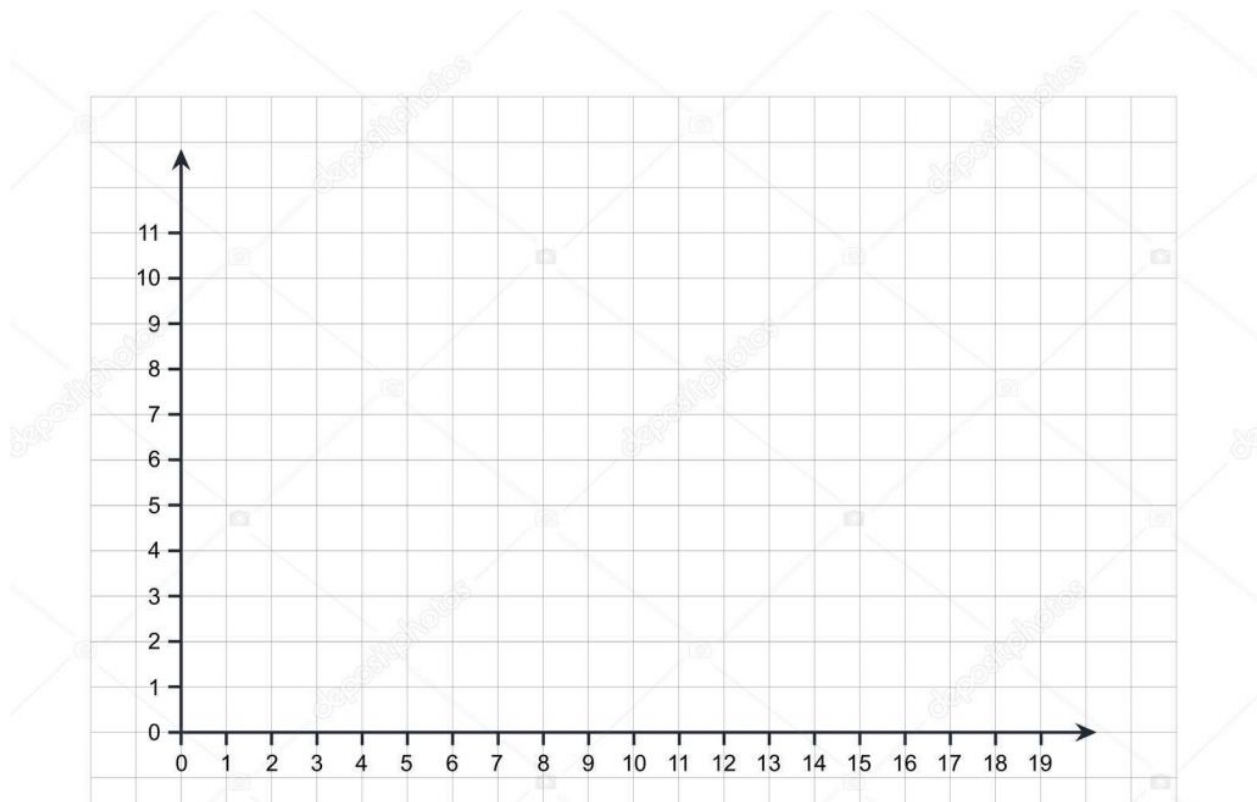
Guided Practice Question:

Part A: Do the points  $(2,5)$ ,  $(1,3)$  and  $(3,7)$  represent a proportional relationship?



Part B: The table shows the prices a bakery charges for doughnuts. Is the relationship the number of doughnuts and the cost proportional?

Number of Doughnuts	Total Price
2	\$1
12	\$6
2	\$1.50
7	\$3.50



Video: [Watch here](#)

Photo: [View here](#)

### **Strategic Math Plan:**

- 1. Read and Interpret the Question**
- 2. Make a Plan**
- 3. Solve**
- 4. Check your work**



**PART B: Independent Practice** - Complete the following problems below using the SMP.

Additional Video Resource: [Interpret Graphs](#)

- 1) Jackie is making a snack mix for a party. She is using cashews and peanuts. The table below shows the relationship of the number of packages of cashews she needs to the number of cans of peanuts she needs to make the mix.

Packages of Cashews	Cans of Peanuts
0	0
1	2
2	4
3	6
4	8

- a) Write an equation to represent this relationship.  
b) Describe the ordered pair (12,24) in the context of the problem.

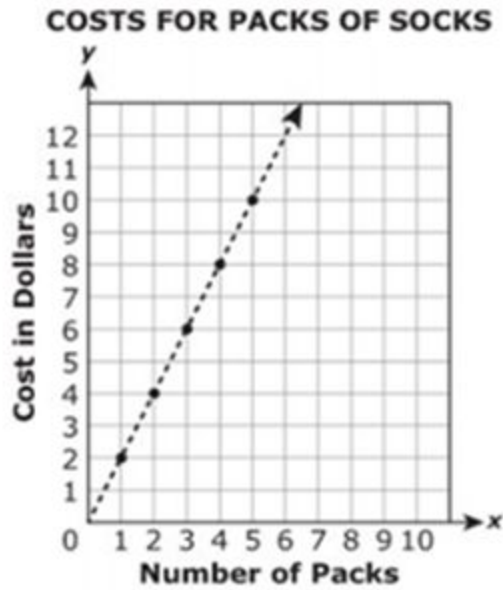
- 2) The following table shows the amount of candy and price paid.

Amount of Candy (in pounds)	2	3	5
Cost (in dollars)	5	7.5	12.5

- a) Is the cost of the candy proportional to the amount of candy?  
b) What does the point (12,30) represent in the context of this problem?



3) Use the graph of this proportional relationship to answer parts A and B.



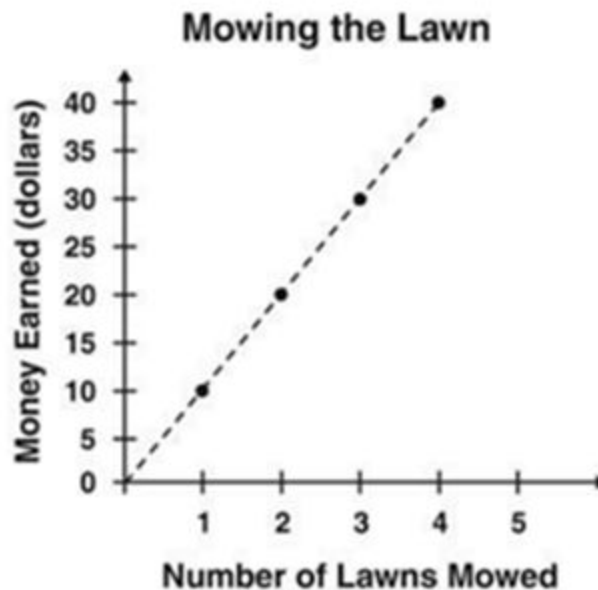
Part A: Which point represents the unity rate? Explain what this point means in the context of this problem.

Part B: What do the coordinates (30,60) mean in this problem?

**PART C: Exit Ticket** - Complete the following problems below using the SMP. Submit your answers online using [this Illuminate link](#).

1)

The graph shows the amount of money Vernon earns mowing lawns.

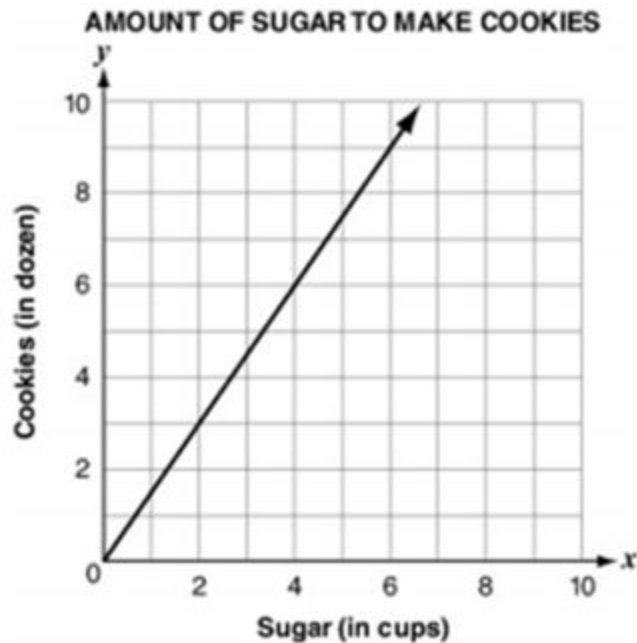


What does Point (3, 30) on the graph mean?

- A. Vernon mowed 3 lawns and earned \$5.
- B. Vernon mowed 30 lawns and earned \$3.
- C. Vernon mowed 3 lawns and earned \$10.
- D. Vernon mowed 3 lawns and earned \$30.

2) **Reminder:** 1 dozen = 12 cookies

The graph below shows the amount of sugar required to make different-sized batches of cookies.



Which statement is **true** about the graph of the line?

- A. The point (3, 2) lies on the graph and indicates that 24 cookies can be made from 3 cups of sugar.
- B. The point (4, 6) lies on the graph and indicates that 48 cookies can be made from 6 cups of sugar.
- C. The point (2, 3) lies on the graph and indicates that 36 cookies can be made from 2 cups of sugar.
- D. The point (6, 4) lies on the graph and indicates that 64 cookies can be made from 6 cups of sugar.

**PART D: Fluency** - Log onto IXL and complete this exercise. You may use a notebook to solve these questions and show your work.

[Practice on IXL](https://www.ixl.com/math/grade-7/interpret-graphs-of-proportional-relationships)

<https://www.ixl.com/math/grade-7/interpret-graphs-of-proportional-relationships>

## Grade 7 Week 2 Day 3 Assignment (4/1/20)

Common Core Aligned Standard: **7.RP.3**

Objective: SWBAT use proportional relationships to solve multistep ratio and percent real-world and mathematical problems.

### **Lesson At-A-Glance for Today**

- A. Watch Video & Guided Practice (about 10 mins)
- B. Solve problems independently following the SMP (about 25 mins)
- C. Complete the Exit Ticket (about 10 mins)
- D. Log onto IXL link (about 15 mins)

**PART A: Guided Practice** - Watch the teacher mini-lesson video and use the exemplar to follow along to complete guided practice problem(s).

Guided Practice Question: 150 is the amount after a 25% decrease was applied to a number. What is the number?

Video: [Watch here](#)

Photo: [View here](#)

### **Strategic Math Plan:**

- 1. Read and Interpret the Question**
- 2. Make a Plan**
- 3. Solve**
- 4. Check your work**



Additional Video Resource: [Solving word problem using proportional relationship](#)

- 1) What is the cost of the computer that originally costs \$1,850 after a markup of 75% ?
- 2) A ski shop has a markup rate of 50%. Find the selling price of skis that cost the store owner \$300.
- 3) Write an equation to determine the selling price in dollars,  $p$ , on an item that is originally priced  $s$  dollars after a markdown of 15%.

**PART C: Exit Ticket** - Complete the following problems below using the SMP. Submit your answers online using [this Illuminate link](#).

1) With the recent success of the Brooklyn Nets, all tickets prices have increased by 22%. Which expression would **not** be used to determine the new price of tickets, if the  $p$  represents the old price?

- A.  $0.78p$
- B.  $1.22p$
- C.  $0.22p + p$
- D.  $p + 0.22p$

2) The amount of money in a bank account increased by 21.5% over the last year. If the amount of money at the beginning of the year is represented by  $n$ , which expression represents the amount of money in the bank account after the increase?

- A.  $n + 0.215n$
- B.  $n + 21.5n$
- C.  $0.215n$
- D.  $21.5n$

**PART D: Fluency** - Log onto IXL and complete this exercise. You may use a notebook to solve these questions and show your work.

<https://www.ixl.com/math/grade-7/multi-step-problems-with-percents>

Grade 7 Week 2 Day 4 Assignment (4/2/20)  
Common Core Aligned Standard: 7.RP.3

Objective: SWBAT use proportional relationships to solve multistep ratio and percent real-world and mathematical problems.

**Lesson At-A-Glance for Today**

- A. Watch Video & Guided Practice (about 10 mins)
- B. Solve problems independently following the SMP (about 25 mins)
- C. Complete the Exit Ticket (about 10 mins)
- D. Log onto IXL link (about 15 mins)

**PART A: Guided Practice** - Watch the teacher mini-lesson video and use the exemplar to follow along to complete guided practice problem(s).

Guided Practice Question: A car dealership pays its salespeople on commission. For every car that they sell, they earn 2.5% of the cost of the car before tax. Personal property tax for vehicles is 4.25%. If a salesperson sells a Honda CRV for \$28,700, how much will the car be with tax and how much will the salesperson make on commission?

Video: [Watch here](#)

Photo: [View here](#)



**Strategic Math Plan:**

1. Read and Interpret the Question
2. Make a Plan
3. Solve
4. Check your work

**PART B: Independent Practice** - Complete the following problems below using the SMP.

Additional Resources: [Percent Word Problem Example 1](#) & [Percent Word Problem Example 2](#)

- 1) You have a coupon for an additional 25% off the price of any sale item at a store. The store has put a robotics kit on sale for 15% off the original price of \$40. What is the price of the robotics kit after both discounts?
- 2) You work as a car salesman and make 20% commission on all sales. On Monday, you sell a car for \$25,500. How much commission do you make?
- 3) Mr. Woodruff went to dinner with some of his friends. The bill came to \$143. Then the restaurant added 8.5% tax. When Mr. Woodruff got the bill (after the tax had been added), he decided to give the waiter a 20% tip. How much did Mr. Woodruff spend altogether?



**PART C: Exit Ticket** - Complete the following problems below using the SMP. Submit your answers online using [this Illuminate link](#).

1) During a sale, a store offered a 40% discount on a particular camera that was originally priced at \$450. After the sale, the discounted price of the camera was increased by 40%. What was the price of the camera after this increase?

- A. \$252
- B. \$360
- C. \$378
- D. \$450

2) You work at a department store and make \$9 per hour plus 12% commission on all sales. On Friday, you work 6 hours and sell \$700. Which statements below are true? **Select ALL** that apply.

- A. You make \$54 before sales
- B. You make \$784 in commission
- C. You make \$84 in commission
- D. You make \$138 in total

**PART D: Fluency** - Log onto IXL and complete this exercise. You may use a notebook to solve these questions and show your work.

<https://www.ixl.com/math/grade-7/percents-of-numbers-word-problems>