

## G6-M1 – Topic C

G6-M1-L16: Throughout the early lessons of this topic, continue to do short review fluency activities that address Topic B, e.g. *Project a blank table and a coordinate plane with coordinates plotted. Using the coordinates, fill in the table.*

G6-M1-L17: Consider using *Friendlier Numbers* for Example 1, e.g. 265:5 instead of 434:7.

G6-M1-L18: Stations are recommended in this lesson. I have some reservations about stations in mathematical instruction. See essay below:

<http://www.teacherbilldavidson.com/essays/circling-around-the-subject>

G6-M1-L19-20: Throughout this topic, consider doing *Anticipatory Fluency* to prepare students for Topic D. In Topic D, students will need to write fractions with denominators that are factors of 100 as percentages. Consider the following progression, moving on to a new phase of complexity after master.

Phase 1: *Factors of 100*:  $10 \times \underline{\quad} = 100$ ,  $50 \times \underline{\quad} = 100$ ,  $2 \times \underline{\quad} = 100$ ,  $20 \times \underline{\quad} = 100$ ,  
 $5 \times \underline{\quad} = 100$ ,  $4 \times \underline{\quad} = 100$ ,  $25 \times \underline{\quad} = 100$

Phase 2: *Equivalent Unit Fractions*:  $\frac{1}{2} = \frac{\quad}{100}$ ,  $\frac{1}{4} = \frac{\quad}{100}$ ,  $\frac{1}{50} = \frac{\quad}{100}$ , etc.

Phase 3: *Equivalent Non-unit Fractions*:  $\frac{3}{50} = \frac{\quad}{100}$ ,  $\frac{7}{25} = \frac{\quad}{100}$ ,  $\frac{5}{5} = \frac{\quad}{100}$ , etc.

G6-M1-L21: When working with conversions, give students access to simple unit conversions without making it too easy for them to reference. For example, place a conversions poster in the back of the classroom so it's inconvenient to look at. If students need to stretch & turn around to locate the poster, there's a chance that they will try & recall the conversion before doing so. If the chart is positioned directly in front of them (e.g. next to the board) then they are unlikely to do so.

G6-M1-L22: The exploratory challenge doesn't justify fifteen minutes of class time. Consider doing an alternative physical activity in class, e.g. the time needed to do 10 jumping jacks.

G6-M1-L23: For remediated Speed Practice Problems, see attached.

Distance	Speed	Time
	10 km/h	8 h
12 m	3 m/s	
56 km		14 h

A train traveled 320 miles in 4 hours. Find its speed in mi/h.

Tai walked 8 miles at a speed of 4 mi/h. How long was he walking?

A rocket traveled at a speed of 60 mi/sec. How far did it travel in 5 seconds?

Teacher Cristobal went for a 120-mile drive. He drove 50 miles in the first 2 hours, and the remainder in the next 4 hours. What was his average speed for the entire journey?

**G6-M1-L16 Subset**

Round to the nearest ten.

1)  $63 \approx$

2)  $963 \approx$

3)  $1,963 \approx$

4)  $79 \approx$

5)  $579 \approx$

6)  $3,579 \approx$

7)  $97 \approx$

8)  $297 \approx$

9)  $47,297 \approx$

Round to the nearest hundredth.

10)  $1.963 \approx$

11)  $3.579 \approx$

12)  $47.297 \approx$

Solve.

13)  $15 \div 3 =$

14)  $\frac{15}{3} =$

15)  $\frac{15}{5} =$

13)  $16 \div 8 =$

14)  $\frac{16}{8} =$

16)  $\frac{16}{2} =$

Mr. Robata walks 16 miles in 4 hours.

17) What is his unit rate?

18) What is his rate unit?

A coffee shop sells 360 cups of coffee in 3 hours.

19) What is the unit rate?

20) What is the rate unit?

### G6-M1-L17 Subset

Find the missing numerator.

$$1) \frac{4}{1} = \frac{\quad}{3}$$

$$2) \frac{40}{1} = \frac{\quad}{3}$$

$$3) \frac{40}{1} = \frac{\quad}{7}$$

$$4) \frac{2}{3} = \frac{8}{\quad}$$

$$5) \frac{20}{3} = \frac{80}{\quad}$$

$$6) \frac{20}{7} = \frac{80}{\quad}$$

Find the missing numerator or denominator.

$$7) \frac{1}{10} = \frac{\quad}{30}$$

$$8) \frac{1}{10} = \frac{\quad}{90}$$

$$8) \frac{1}{10} = \frac{7}{\quad}$$

10) A train travels a speed of 30 miles per hour. How far does it travel in 5 hours?

11) During a hurricane, rain fell at 3 inches an hour for 7 hours. How many inches of rain accumulated altogether?

## G6-M1-L19 Subset

### Vehicle 1

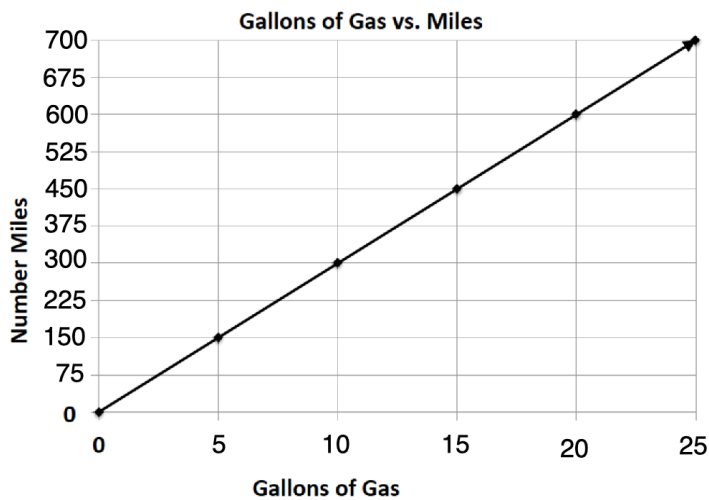
Gallons of Gas	2	4	6
Number of Miles	100	200	300

How many miles per gallon of gas does Vehicle 1 get?

How many miles is Vehicle 1 likely to travel on 10 gallons of gas?

How many gallons of gas does it take Vehicle 1 to travel 450 miles?

### Vehicle 2



How many miles per gallon of gas does Vehicle 2 get?

How many miles is Vehicle 1 likely to travel on 3 gallons of gas?

How many gallons of gas does it take Vehicle 1 to travel 210 miles?

**G6-M1-L20 Subset**

$c = 2.11s$ , where  $c$  represents the cost in dollars and  $s$  represents the number of sodas. Fill in the table below.

Sodas	1	2	4	100
Cost (\$)				

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Number of cracker boxes	3	6	9	12
Cost (\$)	9	18	27	36

- 1) What is the cost of 1 box of crackers?
  
- 2) What is the cost of 5 boxes of crackers?
  
- 3) What is the cost of 90 boxes of crackers?

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The table below shows the amount of money Brian earns working at a corner store.

Number of hours worked	2	4	6	8
Money earned (\$1)	25	50	75	100

How much does Brian earn per hour?

**G6-M1-L21 Subset**

1) 1 ft = \_\_\_\_\_ in

2) 2 ft = \_\_\_\_\_ in

3) 4 ft = \_\_\_\_\_ in

4) 1 yd = \_\_\_\_\_ ft

5) 2 yd = \_\_\_\_\_ ft

6) 3 yd = \_\_\_\_\_ ft

7) 10 yd = \_\_\_\_\_ ft

8) 1 m = \_\_\_\_\_ cm

9) 7 m = \_\_\_\_\_ cm

10) 1 km = \_\_\_\_\_ m

11) 25 km = \_\_\_\_\_ m

12) 16 oz = \_\_\_\_\_ lb

13) 160 oz = \_\_\_\_\_ lb

14) 5,280 ft = \_\_\_\_\_ mi

**G6-M1-L22 Subset**

- 1) In the equation  $d = r * t$ , what does each letter stand for?
  
  
  
  
  
  
  
  
  
  
- 2) A train traveled at a constant speed of 50 miles per hour for a seven-hour journey. How far did the train travel?
  
  
  
  
  
  
  
  
  
  
- 3) A triathlete ran 21 miles in 3 hours. How fast did they run?
  
  
  
  
  
  
  
  
  
  
- 4) Cassidy drove 280 miles at an average speed of 70 miles per hour. For how long did Cassidy drive?



## G6-M1-L23 Subset

- 1) In the equation  $d = r * t$ , what does each letter stand for?
- 2) A train traveled at a constant speed of 30 miles per hour for a five-hour journey. How far did the train travel?
- 3) Cassidy drove 280 miles at an average speed of 70 miles per hour. For how long did Cassidy drive?
- 4) Owen ran 16 miles in 4 hours. Naia ran 15 miles in 3 hours. Who ran faster?