Name: _____ Date: December 13, 2019____

Math: Ratio Review Activities Your Ratio Review packet /test Tues.	

Social Studies:
    - **Mapping India**
    - **Stations**
 	
HW: Owed work	

ELA: Daily Warm Up Reading Strategies- Visualization	
Science - Hand in Completed Force #2 NB - Quiz #2 Force	
Computer Apps/ Technology	

Name _____

Date _____ Pd _____

RATiOS UNiT STUDY GUiDE

Solve each of the problems below. These represent the types of questions on your test. Be sure to ask questions if you need more help with a topic.

i CAN UNDERSTAND THE CONCEPT OF A RATiO.   6.RP.I

1. All of the letters in the alphabet are randomly placed in a bag. Each letter appears just once. What is the ratio of vowels to consonants?	2. Abe's Apple Orchard plants both green apple trees and red apple trees. This planting will include 21 red apple trees and 18 green apple trees. What is the ratio of green apple trees to red apple trees?	3. Determine if 12:16 and 72:96 are equivalent ratios.

i CAN USE RATiOS TO SOLVE REAL-WORLD AND MATHEMATICAL PROBLEMS.   6.RP.3

4. A florist uses 160 roses to make 5 identical flower arrangements. How many roses would the florist use to create 8 identical arrangements?	5. At a hot dog stand, they serve regular and footlong hot dogs at a ratio of 3 to 2. Based on this ratio, how many footlong hot dogs will be served if there are a total of 80 hot dogs served?
6. A large community college has professors and lecturers. The total number of faculty members is 228. The school reported that they had 5 professors for every 14 lecturers. How many of each type of faculty member does the community college employ?	7. In the high school band, there are 2 percussionists on the sidelines to every 13 marching instruments. If the high school band has 180 total members, then how many percussionists are on the sidelines?

8. A dog walking service offers a daily service and a weekly service. In the winter, the ratio of daily customers to weekly customers was 1:5. However, in the spring, more customers moved to the daily service because of the nicer weather. After the weather change, the ratio was 4:2. If there were 125 weekly customers in the winter, then how many daily customers were there in the spring?

---

9. A pancake recipe calls for 2 cups of flour for every 1.5 cups of milk. Which table represents this relationship?

CUPS OF FLOUR	CUPS OF MILK
2	1.5
4	3
6	4.5
8	5

CUPS OF FLOUR	CUPS OF MILK
2	1.5
6	4.5
10	6
12	7.5

CUPS OF FLOUR	CUPS OF MILK
2	1.5
4	3
8	6
10	7.5

10. There are 3 feet in every yard. Which table represents this relationship?

FEET	YARDS
6	3
12	6
18	9
24	12

FEET	YARDS
6	2
9	3
12	4
15	5

FEET	YARDS
3	1
9	2
12	3
15	4

11. The table below shows an equivalent ratio. Fill in the missing values.

1	
	24
	42
10	
13	78

A family tradition involves creating a felt garland at Christmas. Each family member recorded their time and the number of pieces on their garland. The results are shown below.

MEEMA	
MiNUTES	PiECES
2	24
4	48
8	96
12	144
16	192

PAPA	
MiNUTES	PiECES
3	24
5	40
7	56
9	72
11	88

AUNTiE JO	
MiNUTES	PiECES
2	18
5	45
8	72
11	99
14	126

12. Place the family members in order from fastest to slowest.

13. How many minutes will it take each member of the family to string 72 pieces?

14. The total number of laps (L) a swimmer swims can be represented by the equation $L = 12d$. Which table represents this relationship?

TOTAL LAPS (L)	DAYS (D)
1	12
2	24
3	36
4	48

DAYS (D)	TOTAL LAPS (L)
1	12
2	24
3	36
4	48

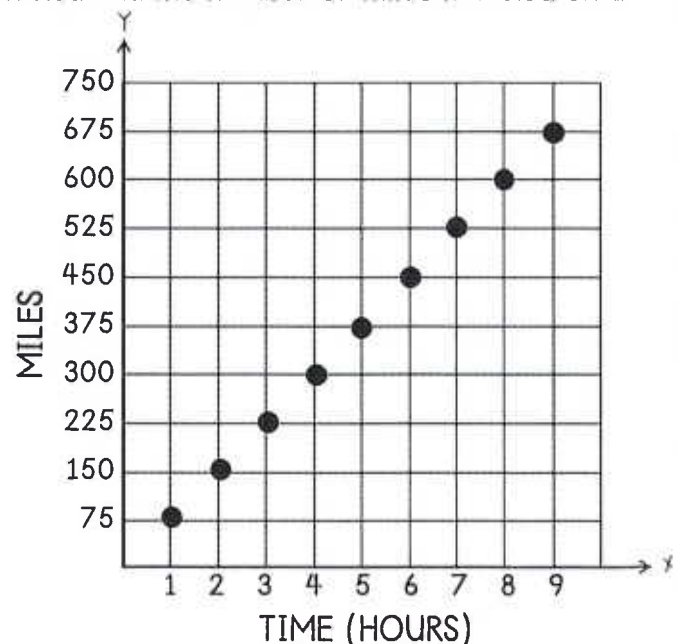| DAYS (D)	TOTAL LAPS (L)
12	1
24	2
36	3
48	4

The relationship between the number of hours traveled and the number of miles traveled on a family road trip is graphed below.

15. What is the ratio of hours to miles?

16. How many miles could the family travel in a period of 12 hours?

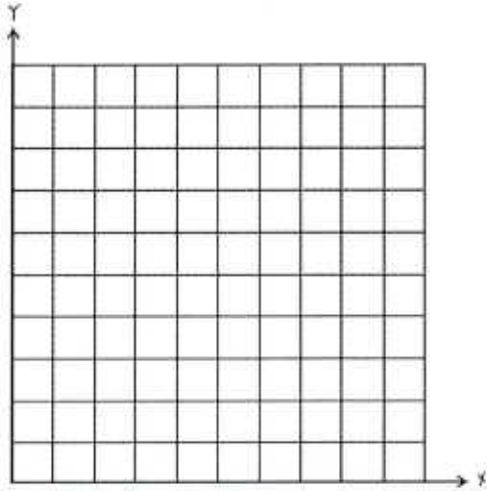17. About how many hours will it take the family to travel 700 miles?

i CAN USE RATIO REASONING TO SOLVE REAL-WORLD PROBLEMS WITH TABLES, EQUATIONS, AND VALUES ON THE COORDINATE PLANE.

6.RP.3A

18. A babysitter earns an hourly wage. Complete the information below.

[GRAPH]

[RATIO TABLE]

HOURS (H)	[process]	$ TOTAL (T)
1		15
2		30
3		45
4		60
5		75
6		90
7		105
8		120
9		135

[VERBAL DESCRIPTION]

[EQUATION]

19. What is the ratio of money earned to hours?

20. How many hours does it take to earn $180?

21. If the babysitter continued with the same ratio, then how much money would she be able to make in 20 hours?

22. What does the ordered pair (5, 75) represent in this situation?

i'VE GOT iT!
What concepts can I ace on the test?

Name _____

Date _____ Pd_____

RATIOS UNIT STUDY GUIDE

Solve each of the problems below. These represent the types of questions on your test. Be sure to ask questions if you need more help with a topic.

i CAN UNDERSTAND THE CONCEPT OF A RATIO.   6.RP.1

1. All of the letters in the alphabet are randomly placed in a bag. Each letter appears just once. What is the ratio of vowels to consonants?	2. Abe's Apple Orchard plants both green apple trees and red apple trees. This planting will include 21 red apple trees and 18 green apple trees. What is the ratio of green apple trees to red apple trees?	3. Determine if 12:16 and 72:96 are equivalent ratios.
5:21	6:7	equivalent

i CAN USE RATIOS TO SOLVE REAL-WORLD AND MATHEMATICAL PROBLEMS.   6.RP.3

4. A florist uses 160 roses to make 5 identical flower arrangements. How many roses would the florist use to create 8 identical arrangements?	5. At a hot dog stand, they serve regular and footlong hot dogs at a ratio of 3 to 2. Based on this ratio, how many footlong hot dogs will be served if there are a total of 80 hot dogs served?
256 roses	32 footlong hot dogs
6. A large community college has professors and lecturers. The total number of faculty members is 228. The school reported that they had 5 professors for every 14 lecturers. How many of each type of faculty member does the community college employ?	7. In the high school band, there are 2 percussionists on the sidelines to every 13 marching instruments. If the high school band has 180 total members, then how many percussionists are on the sidelines?
60 professors, 168 lecturers	24 percussionists

i CAN USE RATiOS TO SOLVE REAL-WORLD AND MATHEMATiCAL PROBLEMS. 6.RP.3

8. A dog walking service offers a daily service and a weekly service. In the winter, the ratio of daily customers to weekly customers was 1:5. However, in the spring, more customers moved to the daily service because of the nicer weather. After the weather change, the ratio was 4:2. If there were 125 weekly customers in the winter, then how many daily customers were there in the spring?

100 daily customers

i CAN MAKE TABLES OF EQUiVALENT RATiOS AND FiND MiSSiNG VALUES. 6.RP.3A

9. A pancake recipe calls for 2 cups of flour for every 1.5 cups of milk. Which table represents this relationship?

CUPS OF FLOUR	CUPS OF MiLK
2	1.5
4	3
6	4.5
8	5

CUPS OF FLOUR	CUPS OF MiLK
2	1.5
6	4.5
10	6
12	7.5

CUPS OF FLOUR	CUPS OF MiLK
2	1.5
4	3
8	6
10	7.5

10. There are 3 feet in every yard. Which table represents this relationship?

FEET	YARDS
6	3
12	6
18	9
24	12

FEET	YARDS
6	2
9	3
12	4
15	5

FEET	YARDS
3	1
9	2
12	3
15	4

11. The table below shows an equivalent ratio. Fill in the missing values.

1	6
4	24
7	42
10	60
13	78

©Mastering the Middle LLC, 2022

I CAN USE TABLES TO COMPARE RATIOS.   6.RP.3A

A family tradition involves creating a felt garland at Christmas. Each family member recorded their time and the number of pieces on their garland. The results are shown below.

MEEMA	
MINUTES	PIECES
2	24
4	48
8	96
12	144
16	192

PAPA	
MINUTES	PIECES
3	24
5	40
7	56
9	72
11	88

AUNTIE JO	
MINUTES	PIECES
2	18
5	45
8	72
11	99
14	126

12. Place the family members in order from fastest to slowest.

Meema, Auntie Jo, Papa

13. How many minutes will it take each member of the family to string 72 pieces?

Meema – 6 minutes, Auntie Jo – 8 minutes, Papa – 9 minutes

14. The total number of laps (L) a swimmer swims can be represented by the equation $L = 12d$. Which table represents this relationship?

TOTAL LAPS (L)	DAYS (D)
1	12
2	24
3	36
4	48

DAYS (D)	TOTAL LAPS (L)
1	12
2	24
3	36
4	48

DAYS (D)	TOTAL LAPS (L)
12	1
24	2
36	3
48	4

I CAN USE RATIO REASONING TO SOLVE REAL-WORLD PROBLEMS.   6.RP.3A

The relationship between the number of hours traveled and the number of miles traveled on a family road trip is graphed below.
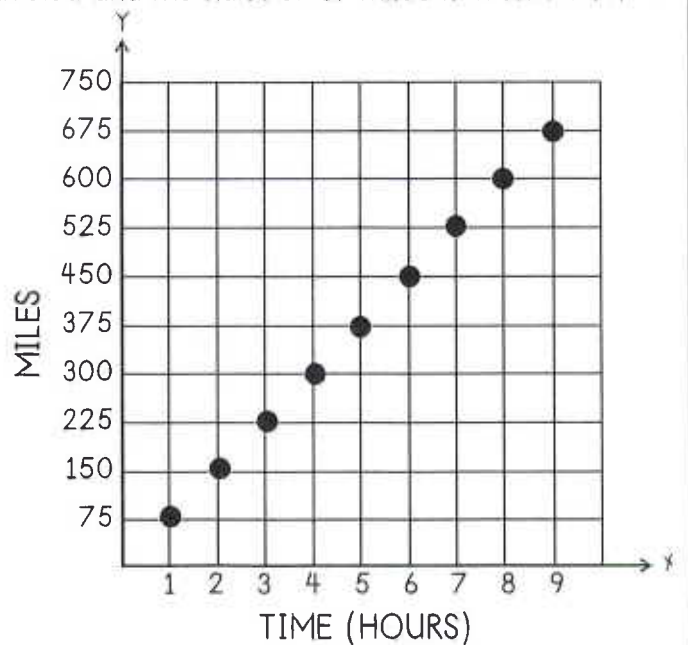
15. What is the ratio of hours to miles?

1:75

16. How many miles could the family travel in a period of 12 hours?

900 miles

17. About how many hours will it take the family to travel 700 miles?

about 9 hours and 20 minutes

i CAN USE RATiO REASONiNG TO SOLVE REAL-WORLD PROBLEMS WiTH TABLES, EQUATiONS, AND VALUES ON THE COORDiNATE PLANE.

6.RP.3A

18. A babysitter earns an hourly wage. Complete the information below.

[GRAPH]

Babysitting Wages

Total Earned

Number of Hours

[RATiO TABLE]

HOURS (H)	[process]	$ TOTAL (T)
1	1 · 15	15
2	2 · 15	30
3	3 · 15	45
4	4 · 15	60
5	5 · 15	75
6	6 · 15	90
7	7 · 15	105
8	8 · 15	120
9	9 · 15	135

[VERBAL DESCRiPTiON]

A babysitter earns $15 per hour when she babysits.

[EQUATiON]

$t = 15h$ or $t = h \cdot 15$

19. What is the ratio of money earned to hours?

15:1

20. How many hours does it take to earn $180?

12 hours

21. If the babysitter continued with the same ratio, then how much money would she be able to make in 20 hours?

$300

22. What does the ordered pair (5, 75) represent in this situation?

the babysitter worked 5 hours and earned $75

i'VE GOT iT!

What concepts can I ace on the test?