

Cohen Middle School
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Elmira Heights, NY 14903
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Name: _____ Date: January 8, 2020 _____

Math:

Rate & Unit Rate Practice

hwk: Wkshrt & test Corrections

Social Studies:

- India Section III Origins of Buddhism

HW: Ganesh

ELA:

Daily Warm Up

Brain Pop Video Lesson:
Theme

Science

- Finish "Elevator to Space"
Packet from Tuesday.
- Draw in objects on (page 4)
As found within layers of the Atmosphere

Computer Apps/ Technology

Ribbon Bar Labeling

due Fri. 1/10



Unit Rates

Warm-up

Diet Coke was on sale last week. It cost \$10 for every 4 packs of Diet Coke.

How much do 2 pack of Diet Coke cost?

How much does 1 pack of Diet Coke cost?

Vocabulary

- **Rate:** A Comparison of 2 quantities with different units
 - **Example:**
- **Unit Rate:** A rate that is simplified to the second term
 - **Example:** or the denominator is 1.

Let's try a few easy ones to start:

I can eat 20 hot dogs in 10 minutes...how many hot dogs can I eat in 1 minute? _____

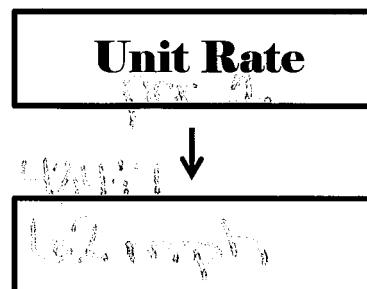
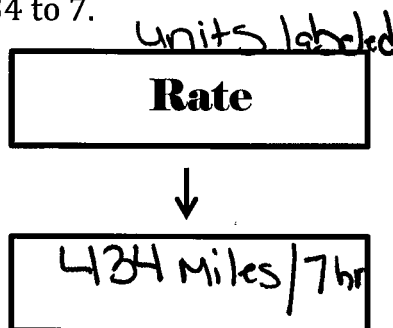
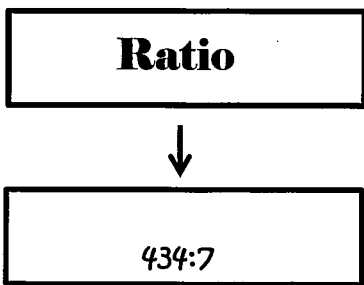
My sister spent \$75 on 3 pairs of jeans...how much did she spend on 1 pair of jeans? _____

What do you notice that both of these have in common? both are unit rates

Today we are going to learn a few different strategies to find unit rate. Simply put, a unit rate means that we need to reduce a ratio down so there is a 1 on the bottom or in the second half of the scenario.

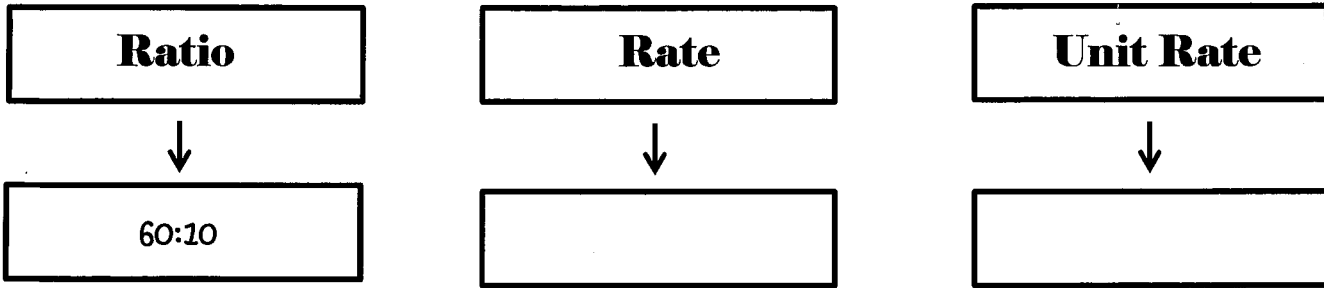
Example 1: (Unit Rate using division)

The ratio of miles to hours is 434 to 7.



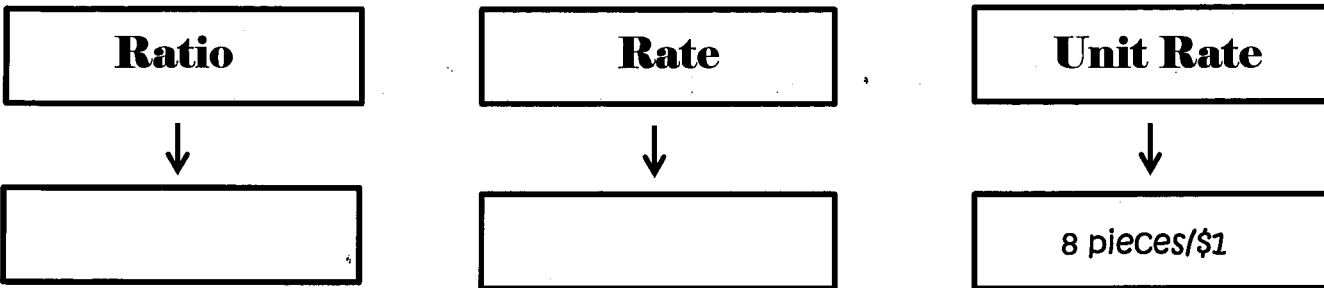
Example 2: (Unit Rate using division)

I can travel 60 feet in 10 seconds.



Example 3: (Unit Rate using division)

I can buy 8 pieces of gum for \$1. How many pieces can I buy for \$3.50?



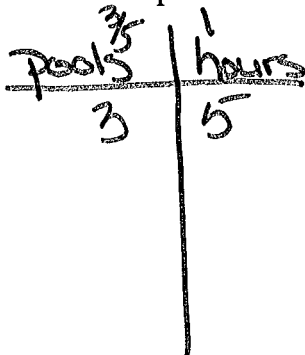
**We can go both ways when discussing unit rates. Sometimes you will be given the unit rate and sometimes we will be given a regular ratio and asked to make it into a unit rate.*

Example 4:

David can clean pools at a rate of $\frac{3}{5}$ pools/hour. (A unit rate can have a fraction in it!)

a. Discuss what this rate means.

b. What is the ratio of pools to hours? _____



c. Determine how many pools can David clean in 10 hours.

Target Statement David can clean _____ pools in 10 hours.

Show Work:

<u>p</u>	<u>h</u>
3	5
6	10
9	15
12	20
15	25

$$h = \frac{5}{3}p \quad \text{equation}$$
$$p = \frac{3}{5}h$$

d. How long does it take David to clean 15 pools.

Target Statement It takes David _____ hours to clean 15 pools.

Show Work:

Proportional Method

$$\frac{3p}{5h} = \frac{15p}{xh}$$

Example 5:

Alivia can swim at a constant speed of $\frac{5}{2}$ meters/second.

- a. What is the ratio of meters to seconds?

- b. Alivia is trying to qualify for the National Swim Meet. To qualify he must complete a 100 meter race in 45 seconds. Determine if Alivia be able to qualify? Why or why not?

Target Statement _____

Show Work:

- c. Alivia is also attempting to qualify for the same meet in the 200 meter event. To qualify, she would have to complete the race in less than 75 seconds. Determine if Alivia will be able to qualify. Why or why not?

Target Statement _____

Show Work:

Name _____

Period _____

Homework: Finding a Rate by Dividing Two Quantities

1. Emma earns \$17 per hour tutoring student-athletes at Brooklyn University.
 - a. If Emma tutored for 12 hours this month, how much money did she earn this month?

Target Statement _____

- b. If Emma tutored for 19.5 hours last month, how much did she earn last month?

Target Statement _____

2. Brenden hopes to earn a college basketball scholarship. To improve his shooting skills, he shoots **50** baskets/day. If Brenden shoots **50** baskets every day for **60** days, how many shots would he take?

Show work:

Target Statement _____

3. Notebooks are on sale for **4** notebooks/dollar. Mrs. Testone wants to buy notebooks for her students but only has **\$12** to spend. How many notebooks can Mrs. Testone buy?

Show work:

Target Statement _____

4. 12 laps around the track makes 3 miles. How many laps will Daniel need to run to make 2 miles?

Laps(l)	Miles(m)
	1
12	3
16	
	5

a. Answer: _____

b. Write the *algebraic equations* that can be seen in table.

$m =$ _____ and $L =$ _____

c. Using an equation find out how many laps Daniel has to run to make 9 miles.

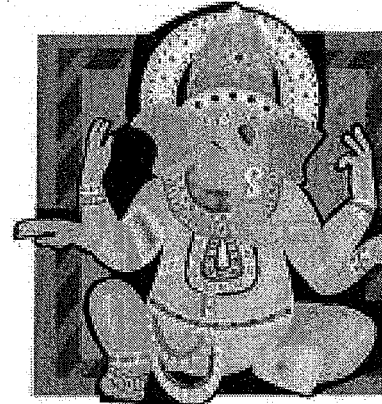
Show work:

Target Statement _____

Name: _____

Ganesh

India is home of a religion called Hinduism. Hinduism has many gods. It has Brahma, the god of creation. It has Shiva, the god of destruction. It has Vishnu, the god of preservation. It has Parvati, the goddess of fertility. The list goes on and on. Of all the deities, however, there is one that really stands out. This particular god, named Ganesh, has the body of a chubby boy and the head of a baby elephant. Ganesh is the god of knowledge. It is also the remover of obstacles.



People in India love Ganesh. But they cannot seem to agree on how Ganesh got its elephant head. Among the various versions, here is a popular one.

Back in the early times, Shiva and Parvati were husband and wife. They adored each other. But Shiva often had to travel to places faraway. He was not always at home to accompany Parvati. One day while he was away again, Parvati wanted to take a bath in her private chamber. To be sure that nobody disturbed her, she used sandalwood paste and molded a little boy. Once that was done, she breathed into it. Suddenly, the little boy sprang forth and came alive!

The little boy said, "Dear mother, what can I do for you?"

Parvati replied, "My dear son, please stand in front of the palace door and allow no one to pass, so I can take a relaxing bath." With that said, Parvati returned to her private chamber and closed the door.

The little boy took his duty seriously. He marched back and forth in front of the palace.

For a while, nothing was happening. There was no visitor. There was no intruder. Even so, the little boy never let his guard down. Then, all of a sudden, he saw a man approaching the palace. He stood firm and blocked the man's path. The man was furious. He wanted to get into the palace. But the little boy would have none of it. He remembered his mother's words well. He would allow no one to disturb Parvati.

The little boy did not know that this man was no ordinary man. This man was Shiva, his father.

Shiva was very mad! He did not know why this little boy refused to let him go back to his own home! The two fought. In a fit of rage, Shiva slashed the little boy's head by accident.

Parvati heard the commotion outside of the palace. She came out to inspect. When she saw the little boy lying on the ground dead, she was very angry! She told Shiva that she made this little boy and that this little boy was their son!

Name: _____

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Shiva was shocked! He had no idea! To calm his beloved wife, he promised Parvati that he would find a new head for the little boy. Then he left.

As Shiva sought a suitable head for his son, he came across a baby elephant. He thought the baby elephant's head would be perfect for his son, so he brought it back and put it on the little boy's body. Then, a miracle happened. The little boy slowly came back to life. Parvati was very happy. She forgave Shiva.

Later as the family celebrated the reunion, Brahma dropped by for a visit. He wanted to send a deity to look after people and take care of their problems. The best candidate, Brahma figured, would be one of Shiva and Parvati's two sons, Kartikeya and the little boy. Shiva and Parvati agreed, but they did not know which son to send. So they decided to hold a contest.

They summoned their sons forward. They told them that whoever finished circling around the entire universe first would win the contest. Kartikeya was very confident. He was not only stronger, but also had a speedy peacock as his transport. How could he lose?

As Kartikeya stood ready for the race, he saw his younger brother approaching the starting line. To his amazement, his brother was riding a little mouse! Kartikeya broke out laughing. He was certain that the victory belonged to him.

At the sound of the signal, Kartikeya took off with his speedy peacock. The little boy, however, did not seem to be in a hurry. Before hopping on the little mouse, he bowed to everyone present. He then slowly circled around his parents, and calmly announced, "I am back."

Shiva and Parvati were shocked. They asked, "Son, what do you think you are doing?"

The little boy replied, "My dear parents, you are everything to me. You have given me life, just as the sun and the earth give energy to all the living things. I love and respect you as much as I love and respect the universe. When I circle around you, I circle around the entire universe."

All the gods present were impressed by the little boy's wisdom. They agreed that he was the perfect candidate for the job! Brahma called the little boy forward. He said, "You show intelligence, clarity, loyalty, and insight. We hereby give you the name Ganesh. From now on, your job is to help people on Earth whenever they are in trouble or in need."

Ganesh, thus, became the god of knowledge and the remover of obstacles. He has since become one of the most popular Hindu deities.

Name: _____

Ganesh

Questions

- _____ 1. Ganesh is the god of which religion?
- A. Islam
 - B. Christianity
 - C. Hinduism
 - D. Buddhism
- _____ 2. Who created Ganesh?
- A. Vishnu
 - B. Brahma
 - C. Parvati
 - D. Shiva
- _____ 3. Why did Ganesh refuse to let Shiva enter the palace?
- A. Because he did not like Shiva
 - B. Because he did not want anyone to disturb his mother
 - C. Because Shiva refused to bribe him
 - D. Because Shiva did not have a proper identification
- _____ 4. How did Kartikeya travel around the universe?
- A. By riding an eagle
 - B. By riding a peacock
 - C. By riding a turtle
 - D. By riding a tiger
- _____ 5. How did Ganesh travel around the universe?
- A. By riding an elephant
 - B. By riding a horse
 - C. By riding a rabbit
 - D. By riding a mouse
- _____ 6. Ganesh is the Hindu god of knowledge and remover of obstacles.
- A. True
 - B. False
- _____ 7. What animal's head did Shiva put on his son's body?
- A. An elephant
 - B. A monkey
 - C. A wolf
 - D. A tiger
- _____ 8. Why did Kartikeya lose the contest?
- A. Because he never showed up for the race
 - B. Because he did not have a ride
 - C. Because he was caught cheating
 - D. Because he was not as smart as Ganesh

