

Hello, Super Sixth Grade!

Today is THINKING THURSDAY!

In the chat box, please tell me some things you THINK you can do to prepare for a test so you do AWESOME the first time? If you want a higher score after the test, what are some things you can do?

THANK YOU!

Mrs. Oakes

If you
choose not to
participate,
turn volume
down until we
move to next
slide.



**I pledge allegiance
to the flag of the
United States of
America,
and to the republic
for which it stands,
one nation under God,
indivisible, with liberty
and justice for all.**

Student Expectations...

Being part of this “school” is awesome! How can YOU make this ocean even more awesome??.



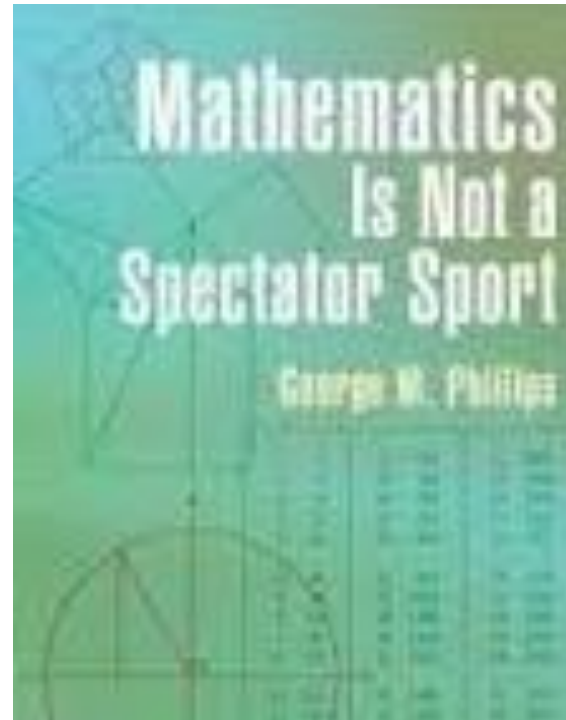
=



- ✓ I will BE HERE! **respond** when my name is called, use **polling tools**, **complete classwork**, **notes**, and **chat** to participate!
- ✓ I will **choose my attitude!**
- ✓ I will **demonstrate respect** and **follow directions** for my classmates and teachers to help **make their day!**
- ✓ I will have **fun** learning!

EVERYONE needs a working mic. Call 1-866-K12-care if it's not working. Let's get it fixed!

GET A CALCULATOR, Notebook
AND PENCIL READY!!!!



Unit 11
Review Day 1

HOMEWORK:

• Study Study Study

- How can I study Mrs. Oakes?
 - watch the recording
 - with help sheets
 - with parents
 - with a friend
 - in office hours

- Students will identify a rate and a ratio
- Students will calculate distance/work using $\text{rate} \times \text{time}$
- Students will calculate how much work can be completed in a given amount of time
- Solve rate, average speed, distance, and time problems.
Calculate the speed using information in a word problem.

RATES:

A ratio uses division to compare two quantities.

A rate is a certain type of ratio.

A rate forms a measurement by comparing two quantities with different units.

Always include the units when writing a rate.

RATES

The path is 14 kilometers long.
Ramon walked it in 4 hours.

Ramon walked at a rate of
14 kilometers every 4 hours,
which you can write as $\frac{14 \text{ km}}{4 \text{ hrs}}$
or $\frac{7 \text{ km}}{2 \text{ hrs}}$.

This ratio is a rate.

NOT A RATE:

Ramon walked 5 miles
and Sue walked 10 miles.

The ratio of miles walked by
Ramon to miles walked by
Sue is 1 to 2, which you can
write as $\frac{1}{2}$.

This ratio is not a rate.

100 Points

Is It A Rate?



$2/7$ Pie



$\frac{8 \text{ miles}}{2 \text{ hours}}$

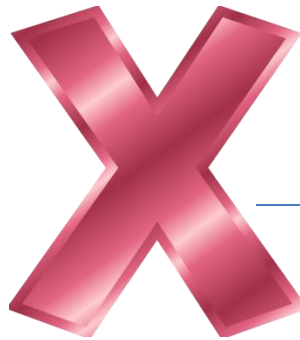
200 Points

Is It A Rate?



\$20

2 books



8

10 cup

DISTANCE FORMULA

$$D = RT$$



Distance

Rate

x

Time

Distance = rate x time

Let's Try One Together



A Deer Runs 50 feet in 5 seconds. How far does it run?

Distance = rate x time

$$D = RT$$

100 points

- A fish can swim 27 feet/ second. How far does he go if he swims for 8 seconds?

A. 35 feet
B. 216 feet
C. 329 feet

Distance = rate x time

$$D = Rt$$

200 Points

- If a deer can run 30 feet per second, how far does it run 20 seconds?
 - A. 50 feet
 - B. 60 feet
 - C. 600 feet
 - D. 225 feet

$$\text{Distance} = \text{rate} \times \text{time}$$
$$D = Rt$$

WORK FORMULA

$$W = RT$$



Work

Rate

x

Time

Work = rate x time

Example:

Solve.

Bill can print 8 nature photos in 5 minutes. How many nature photos can he print in 30 minutes?

Choose a formula.

You need to know *how many*, so use the work formula.

$$w = rt$$

The rate is $\frac{8 \text{ photos}}{5 \text{ min}}$. The time is 30 min.

$$\frac{8 \text{ photos}}{5 \text{ mins}} \times \frac{30 \text{ minutes}}{1}$$

Solve.

Dan is a member of a group that builds and repairs houses for people in need. His group can build 3 houses in 7 days. How many houses can his group build in 140 days?

$$w = rt$$

$$= \frac{\boxed{} \text{ houses}}{7 \text{ days}} \cdot \boxed{} \text{ days}$$

$$= \boxed{} \text{ houses}$$

Dan's group can build $\boxed{}$ houses in 140 days.

Solve.

Dan is a member of a group that builds and repairs houses for people in need. His group can build 3 houses in 7 days. How many houses can his group build in 140 days?

$$w = rt$$

$$= \frac{\boxed{} \text{ houses}}{7 \text{ days}} \cdot \boxed{} \text{ days}$$

$$= \boxed{} \text{ houses}$$

Dan's group can build $\boxed{}$ houses in 140 days.

**AVERAGE
SPEED
PROBLEMS**

SPEED:

Common rate that compares distance to time. Speed represents how fast something moves.

100 Points:

Speed is another word for:

- A. Pumpkins
- B. Rate
- C. Time
- D. Fractions

The word *rate* is often used in place of the word *speed*.

$$\frac{\text{distance}}{\text{time}} = \text{speed}$$

$$\frac{\text{distance}}{\text{time}} = \text{rate}$$

$$\text{time} \cdot \frac{\text{distance}}{\text{time}} = \text{rate} \cdot \text{time}$$

$$\cancel{\text{time}} \cdot \frac{\text{distance}}{\cancel{\text{time}}} = \text{rate} \cdot \text{time}$$

$$d = rt$$

The distance formula is $d = rt$. Use this formula when you know the rate and time and are looking for a distance.

When you know the distance and time and are looking for rate, you can solve for r by dividing both sides by t .

When you know the distance and rate and are looking for time, you can solve for t by dividing both sides by r .

The distance formula can be rewritten in 3 ways.

$$d = rt$$

$$\frac{d}{t} = r$$

$$\frac{d}{r} = t$$

Solve.

A truck driver drove 189 miles in 3 hours and 30 minutes. Find his rate of speed.

— Identify the given information.

$$d = 189 \text{ miles}$$
$$t = 3.5 \text{ hours}$$

60 minutes equals 1 hour, so
30 minutes equals 0.5 hour.

— Choose a formula.

Use $r = \frac{d}{t}$.

We know the distance the truck drove and the time it took. We want to find the rate of speed.

— Use the formula.

$$r = \frac{d}{t}$$
$$= \frac{189 \text{ miles}}{3.5 \text{ hours}}$$
$$= 54 \text{ miles/hour}$$

The truck driver drove at a speed of 54 miles per hour.

A dolphin is swimming at a rate of 3.5 meters per second. How long does it take the dolphin to swim 42 meters?

Identify known information:

$$r = 3.5 \text{ m/s}$$

$$d = 42 \text{ m}$$

Use the formula for time: $t = \frac{d}{r}$

$$t = \frac{\boxed{} \text{ m}}{\boxed{} \text{ m/s}}$$

$$t = \boxed{} \text{ s}$$

100 Points

- A bus traveled 120 miles in 2.5 hours. After picking up new passengers it traveled another 105 miles in 2 hours. What was the average speed of the bus for the entire trip?

A. 48 mi/h

B. 50 mi/h

C. 50.25 mi/h

D. 52.5 mi/h

Pulse Check: How are you?



QUESTIONS:



NICE WORK TODAY!



HOMEWORK:

• Study Study Study

- How can I study Mrs. Oakes?
 - watch the recording
 - with help sheets
 - with parents
 - with a friend
 - in office hours