

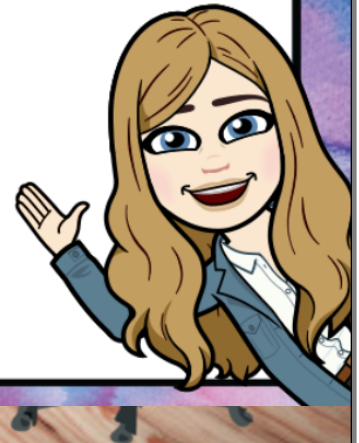
6th Grade
Dec 4, 2020

Please get out your
video notes from
yesterday.

Today we will:
-review video notes
-do some examples
on whiteboards

HOMEWORK:

ALEKS 60 min and 5
topics due Dec 8




 Name _____
 Unit _____ Lesson _____ Due Date _____
 VIDEO NOTES

RATES

Rate: a comparison of two quantities with different kinds of units

Unit Rate: a rate that has a denominator of ONE

WE DO:

Desiree typed a 15-character text message in 5 seconds.

- Write the rate Desiree typed as a fraction. $\frac{15 \text{ characters}}{5 \text{ seconds}}$ $\frac{15}{5} \div \frac{5}{5} = \frac{3 \text{ characters}}{1 \text{ second}}$
- What operation would you use to write the fraction in simplest form? Divide

KEY IDEA: To find unit rate you need to **DUPLICATE**
numerator by denominator!

- a. Ama downloaded 35 songs in 5 minutes. How many songs did she download per minute?

$$\frac{35 \text{ songs}}{5 \text{ min}} \quad \text{num} \div \text{denom.} \quad 35 \div 5 = 7 \text{ songs per minutes}$$

- b. Jonathan is baking several loaves of bread to sell in his bakery. He used 9 cups of water and 12 cups of whole wheat flour. How much water was used per cup of flour?

$$\frac{\text{water} \rightarrow 9 \text{ c}}{\text{flour} \quad 12 \text{ c}} \quad \text{num} \div \text{denom} \quad 9 \div 12 \quad \frac{0.75}{12} \overline{) 9.00} \quad \frac{9}{12} \cdot \frac{3}{3} = \frac{3}{4}$$

$$\frac{0.75 \text{ c of water}}{1 \text{ c flour}} \quad \begin{array}{r} 0.75 \\ 12 \overline{) 9.00} \\ \underline{-84} \\ 60 \\ \underline{-60} \\ 0 \end{array}$$

$$\frac{9}{12} \div \frac{12}{12} = \frac{3}{4} \text{ c water} \\ \text{complex fraction}$$

YOU DO:

Write each rate as a unit rate.

1. 44 points in 4 quarters = $\frac{44}{4} \div \frac{4}{4} = \frac{11}{1}$ Points
quarters

2. 125 feet in 5 seconds =

$$\begin{array}{r} 25 \\ 5 \overline{) 125} \\ \underline{-10} \\ 25 \\ \underline{-25} \\ 0 \end{array}$$

$$\frac{25 \text{ feet}}{1 \text{ second}}$$

3. 360 miles traveled on 12 gallons of gasoline = 30 miles per gallon

$$\frac{360}{12} = 30$$

4. 12 meters in 28 seconds =

$$\frac{12 \text{ m}}{28 \text{ s}} \div \frac{4}{4} = \frac{3}{7} \text{ m/s}$$

$$28 \overline{) 12.00}$$

Name _____
 CLASSWORK Unit ____ Lesson ____ Due Date _____

*on whiteboards

Independent Practice

$$9 \overline{)162}$$

Go online for Step-by-Step Solutions



Write each rate as a unit rate. (Examples 1 and 2)

1. 72 ounces in 6 steaks =

$$\frac{72 \text{ oz}}{6 \text{ steaks}} \div \frac{6}{6} = \frac{12 \text{ oz}}{1 \text{ steak}}$$

2. 162 water bottles in 9 cases =

$$\frac{162 \text{ wb}}{9 \text{ cases}} \div \frac{9}{9} = \frac{18 \text{ wb}}{1 \text{ case}}$$

3 Marcella divided 40.8 gallons of paint among 8 containers. How much paint is in

$$\frac{40.8}{8} \div \frac{8}{8} = \frac{5.1 \text{ gal.}}{1 \text{ container}}$$

4. Central Subs made 27 sandwiches using 12 pounds of turkey. How much turkey was used per sandwich? (Example 2)

$$\frac{12 \text{ lb.}}{27 \text{ sandwiches}} \div \frac{27}{27} = \frac{4}{9} \frac{\text{lb.}}{\text{sandwich}}$$

Extra Practice

Write each rate as a unit rate.

14. Davis printed 24 photos in 8 minutes. How many photos did he print per minute?

3 photos per minute

Homework Help

$$\frac{24 \text{ photos}}{8 \text{ minutes}} \div \frac{8}{8} = \frac{3 \text{ photos}}{1 \text{ minute}}$$

15. Carrie planted 48 tulips in 12 minutes. How many tulips did she plant per minute?

$$\frac{48}{12} \div \frac{12}{12} = \frac{4 \text{ tulips}}{1 \text{ min}}$$

16. Vinnie decorated 72 cookies in 36 minutes. How many cookies did he decorate per minute?

17. Alana biked 45 miles in 3 hours. How many miles did she bike per hour?

18. A Ruby Throated Hummingbird beats its wings 159 times in 3 seconds. How many times does the Ruby Throated Hummingbird beat its wings per second? _____

19. The Reyes family bought four concert tickets for \$252. What was the price per ticket? _____

20. An adult blinks about 450 times in 30 minutes. A 12-year-old blinks about 150 times in 15 minutes. How many more times does an adult blink in 60 minutes than a 12-year-old? _____

