Name_____ Date_____ Period_____

LESSON 3-2 · SESSION 1 · PRACTICE · FORM A

Understanding Unit Rates

Learning target – I can find a unit rate and use rate language such as "per hour" or "each." · 6.RP.A.2

REMEMBER

- **Per** means "for each." A **unit rate** is the amount for **1** unit.
- Divide the first amount by the second: 90 pages ÷ 6 minutes = 15 pages per minute.
- To predict, **multiply** the unit rate. To find a time or amount of units, **divide**.

WORKED EXAMPLE

A printer prints 90 pages in 6 minutes at a steady rate. How many pages in 7 minutes? How long for 45 pages?

Step 1 Divide: 90 ÷ 6 = 15 pages per minute.

Step 2 7 minutes: 15 × 7 = 105 pages.

Step 3 45 pages: 45 ÷ 15 = 3 minutes.

Answer **105 pages; 3 minutes**

WORDS **rate** *(tasa)* · **unit rate** *(tasa unitaria)* · **per** *(por)* · **constant** *(constante)*

PRACTICE

show your work · label units

1. Find each unit rate.

a. 84 words in 7 min = ___ per min

b. $56 for 8 hours = ___ per hour

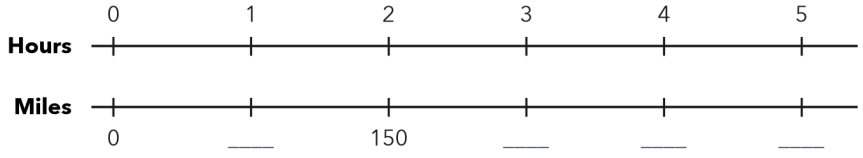
c. 108 miles on 4 gal = ___ per gal

d. 132 steps in 12 s = ___ per s

e. 96 beads on 6 bracelets = ___ each

f. 138 lb of soil in 6 beds = ___ per bed

2. **City Train.** A commuter train travels 150 miles in 2 hours at a steady speed. Complete the double number line.



a. Unit rate: _____ mph

b. Miles in 5 hours: _____ miles

3. Lawn Mowing. David earns $45 for mowing 3 lawns. What is his rate per lawn?

Hint *Divide dollars by lawns.*

Show your work.

Answer_____ per lawn

4. Juice Cost. A 6-pack of juice costs $7.50. Find the cost per bottle.

Show your work.

Answer_____ per bottle

5. Gas Mileage. A car travels 240 miles on 8 gallons of gas.

Hint *For part b, divide the miles by the miles per gallon.*

a. Miles per gallon: _____ mpg

b. Gallons needed for 360 miles: _____ gal

Show your work.

6. Running Practice. Carlos runs 12 miles in 2 hours.

Hint *Time = distance ÷ speed.*

a. Speed: _____ mph

b. Time to run 18 miles at this pace: _____ hours

Show your work.

7. Two Jobs. Job A pays $54 for 6 hours. Job B pays $85 for 10 hours.

a. Hourly rate: Job A ___ Job B ___

b. Which pays more per hour, and by how much? _____

c. Total pay for 14 hours of Job B: _____ dollars

8. Printer Rate. A printer prints 288 pages in 8 minutes at a steady rate.

Hint *Find pages for 1 minute, then multiply by 15.*

a. Pages per minute: _____

b. Pages in 15 minutes: _____

FIND THE ERROR

explain the mistake, then fix it

9. Liam's Work. A bike goes 45 miles in 3 hours. Liam calculated 45 × 3 = 135 miles per hour. Explain his mistake and find the correct rate.

TEST PRACTICE

choose the best answer

10. A car travels 180 miles in 3 hours. The unit rate is –

A 540 miles per hour **B** 60 miles per hour

C 183 miles per hour **D** 1/60 mile per hour

11. 8 apples cost $4.00. The unit price is –

A $0.50 per apple **B** $2.00 per apple **C** $32 per apple **D** $4.00 per apple

SELF-CHECK CODE *find your answer · copy its letter into that problem's box · spell a math word*

27 D	$1.25 I	$15 V	24 X	6 E	75 I	30 D	300 Q	36 S	135 Z

#1c	#2a	#3	#4	#5a	#6a	#8a

CHECK YOURSELF ☐ I can do this on my own ☐ I need a little help ☐ I have a question about #___