Name_____ Date_____ Period_____

LESSON 3-5 · SESSION 2 · PRACTICE · FORM A

Comparing Rates with Benchmarks

Learning target – I can use a benchmark to compare two rates without dividing. · 6.RP.A.3b

REMEMBER

- A **benchmark** is one amount you use for **both** choices. Scale each rate to it, then compare.
- Pick a benchmark both amounts divide into evenly: 12 works for 4 and 6.
- You can also **divide** to find each **unit rate** and compare. Round money to the nearest cent.

WORKED EXAMPLE

Hose A fills 6 gallons in 2 minutes. Hose B fills 10 gallons in 4 minutes. Which is faster?

Step 1 Benchmark: 20 minutes.

Step 2 A: 6 × 10 = 60 gallons. B: 10 × 5 = 50 gallons.

Step 3 Check: 6 ÷ 2 = 3 and 10 ÷ 4 = 2.5 gallons per minute.

Answer **Hose A is faster**

WORDS **benchmark** *(punto de referencia)* · **rate** *(tasa)* · **unit rate** *(tasa unitaria)*

PRACTICE

show your work · label units

1. Find each unit rate.

a. 48 flyers in 3 min ____ per min

b. 84 stairs in 6 min ____ per min

c. $15 for 6 lb ____ per lb

d. 450 miles on 15 gal ____ per gal

2. **Arcade Games.** Game A costs 2 tokens and gives 4 tickets. Game B costs 3 tokens and gives 7 tickets. Use a 30-token benchmark.

Hint *Game A × 15; Game B × 10.*

	Tokens	Tickets	Tickets for 30 tokens
Game A	2	4	
Game B	3	7	

Better game_____

3. **Typing Contest.** Tyler types 140 words in 4 minutes. Sarah types 175 words in 5 minutes. Who types faster?

Hint *Find words per minute for each.*

Show your work.

Faster_____

4. **Gummy Bears.** Store A sells 6 lb for $15. Store B sells 8 lb for $18. Use a 24-lb benchmark to find the better buy.

Show your work.

Better buy_____

5. Corner Store Chips. Store J sells 4 bags of chips for $9.00. Store K sells 6 bags for $13.20.

a. Price per bag: Store J ____ Store K ____

b. Cost of 12 bags: Store J ____ Store K ____

c. Which store is the better buy? _____

6. Ice Rink Passes. Rink A: 5 sessions for $42.50. Rink B: 8 sessions for $66.40. Find the cost per session. Which is the better deal?

Hint *Divide each price by the number of sessions.*

Show your work.

Better deal_____

7. Reading Rates. Reader 1 finishes 40 pages in 5 days. Reader 2 finishes 54 pages in 6 days.

Hint *30 ÷ 5 = 6 and 30 ÷ 6 = 5.*

a. Pages in 30 days: Reader 1 ____ Reader 2 ____

b. Who reads faster? _____

Show your work.

8. Field Trip Vans. Van company A charges $120 for 8 students. Company B charges $176 for 11 students.

a. Use 88 students as a benchmark. Find each total. _____

b. Which company is cheaper per student? _____

c. Why might a benchmark be easier than dividing? _____

FIND THE ERROR

explain the mistake, then fix it

9. Carlos's Work. Ride A costs 2 tickets for 9 points. Ride B costs 5 tickets for 15 points. Carlos subtracted 9 − 2 = 7 and 15 − 5 = 10, so he picked Ride B. Explain his mistake and find the better ride.

_____

_____

_____

TEST PRACTICE

choose the best answer

10. A good benchmark for comparing a 4-pack and a 6-pack is –

A 10 **B** 12 **C** 16 **D** 18

11. At a 12-unit benchmark, Store X costs $30 and Store Y costs $27. The better buy is –

A Store X

B Store Y

C both the same

D impossible to tell

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

270	$8.30	$54	$0.12	70	$26.40	16	$1,408	$34	324
R	A	M	Q	O	P	C	E	Z	X

#1a	#2	#4	#5b	#6	#7a	#8a

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