Name_____ Date_____ Period_____

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

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. 75 flyers in 5 min ____ per min

b. 96 stairs in 8 min ____ per min

c. $18 for 8 lb ____ per lb

d. 320 miles on 10 gal ____ per gal

2. **Sticker Machines.** Machine A costs 2 coins and gives 5 stickers. Machine B costs 3 coins and gives 8 stickers. Use a 30-coin benchmark.

Hint *Machine A × 15; Machine B × 10.*

	Coins	Stickers	Stickers for 30 coins
Machine A	2	5	
Machine B	3	8	

Better machine_____

3. **Typing Contest.** Tyler types 156 words in 4 minutes. Sarah types 190 words in 5 minutes. Who types faster?

Hint *Find words per minute for each.*

Show your work.

Faster_____

4. **Gummy Bears.** Store A sells 4 lb for $9. Store B sells 6 lb for $14. Use a 12-lb benchmark to find the better buy.

Show your work.

Better buy_____

5. **Corner Store Chips.** Store J sells 4 bags of chips for $10.00. Store K sells 6 bags for $14.40.

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: 4 sessions for $34.00. Rink B: 6 sessions for $52.20. 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 35 pages in 5 days. Reader 2 finishes 48 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 $165 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. Maya's Work. Ride A costs 3 tickets for 12 points. Ride B costs 5 tickets for 15 points. Maya subtracted 12 − 3 = 9 and 15 − 5 = 10, so she picked Ride B. Explain her mistake and find the better ride.

TEST PRACTICE

choose the best answer

10. A good benchmark for comparing a 5-pack and a 3-pack is –

A 8 **B** 10 **C** 15 **D** 20

11. A benchmark amount must be one that both rates can –

A reach exactly **B** add to **C** subtract from **D** round to

SELF-CHECK CODE

find your answer · copy its letter into that problem's box · spell a math word

$28.80 G	$27 R	15 B	$17 Z	240 I	288 X	$0.12 Q	$8.50 A	$1,320 N	80 A

#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 #___