Name_____ Date_____ Period_____

LESSON 6-7 · SESSION 2 · PRACTICE · FORM A

Multiples and Least Common Multiple

Learning target – I can list multiples of two numbers and find their least common multiple. · 6.NS.B.4

REMEMBER

- A **multiple** is what you get when you skip-count by a number: 6, 12, 18, 24, …
- The **least common multiple (LCM)** is the smallest multiple above 0 that two numbers share.
- Watch out: 8 × 10 = 80 is a common multiple, but it is **not always the least**.

WORKED EXAMPLE

A library van visits every 8 days and an art cart every 10 days. Both visit today. When do both visit again?

Step 1 Multiples of 8: 8, 16, 24, 32, 40.

Step 2 Multiples of 10: 10, 20, 30, 40.

Step 3 The first number on both lists is 40.

Answer **LCM = 40, so in 40 days**

WORDS **multiple** *(múltiplo)* · **common multiple** *(múltiplo común)* · **least common multiple** *(mínimo común múltiplo)*

PRACTICE

show your work · label units

1. Find the LCM of each pair.

a. 7 and 4 _____

b. 8 and 12 _____

c. 6 and 9 _____

d. 4 and 10 _____

2. **Two Buses.** A red bus reaches a stop every 15 minutes. A blue bus reaches the same stop every 20 minutes. Both are at the stop now.

a. Multiples of 15: _____ Multiples of 20: _____

b. Minutes until both buses are there again: _____ min

3. **Cups and Lids.** Cups come in packs of 14. Lids come in packs of 21. A store wants the same number of cups and lids.

Hint *Skip-count by 21 and stop at a multiple of 14.*

a. Fewest cups and fewest lids: _____

b. Packs of cups ___ Packs of lids ___

Show your work.

4. Practice Days. Band meets every 5 days. Choir meets every 3 days. Both met today. In how many days will both meet again?

Hint *List the meeting days for each group.*

Show your work.

Answer_____ days

5. Owen's Shortcut. Owen says the LCM of 16 and 20 is 320 because 16 × 20 = 320. Is he right? Give the LCM.

Hint *Skip-count by 20 and test each number.*

Show your work.

LCM_____

6. Two Machines. Machine A stamps every 25 seconds. Machine B stamps every 30 seconds. They both stamped just now.

Hint *Divide the LCM by each machine's time.*

a. Seconds until they stamp together again: _____ s

b. Stamps by A ___ Stamps by B ___ (up to that time)

Show your work.

7. Three Lists. Find the least common multiple of 2, 5, and 6.

Hint *Skip-count by 6 and look for a multiple of 5.*

Show your work.

LCM_____

8. Two Alarms. One alarm rings every 9 minutes. Another rings every 12 minutes. Both ring at 7:00 a.m.

a. Find the LCM of 9 and 12. _____

b. When do both ring together next? _____

c. How many times do they ring together after 7:00 and up to 9:00 a.m.? _____

Show your work.

FIND THE ERROR

explain the mistake, then fix it

9. Gia's Work. Gia listed multiples of 3 and of 5. She said the LCM is 30, the second number that appeared on both lists. Explain her mistake. Then give the correct LCM.

_____

_____

_____

TEST PRACTICE

choose the best answer

10. The LCM of 6 and 8 is –

A 2 **B** 14 **C** 24 **D** 48

11. Which number is a multiple of 7?

A 1 **B** 17 **C** 27 **D** 35

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

108 Z	7:36 E	150 I	320 Q	36 L	15 L	42 U	80 T	60 M	30 P

#2b	#3a	#4	#5	#6a	#7	#8a	#8b

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