Name_____ Date_____ Period_____

LESSON 8-3 · SESSION 1 · PRACTICE · FORM A

Multiplication Equations

Learning target – I can solve a multiplication equation by dividing both sides by the same number. · 6.EE.B.7

REMEMBER

- The **coefficient** is the number next to the variable. $5b$ means $5 \times b$.
- Division undoes multiplication. **Divide both sides** by the coefficient.
- **Check** by multiplying: coefficient × your answer = the total.

WORKED EXAMPLE

5 boxes each hold the same number of pencils, 45 in all. Solve $5b = 45$.

Step 1 Divide both sides by 5: $5b \div 5 = 45 \div 5$.

Step 2 Simplify: $b = 9$.

Step 3 Check: $5 \times 9 = 45$.

Answer **Each box holds 9 pencils.**

WORDS **coefficient** *(coeficiente)* · **inverse operation** *(operación inversa)* · **Division Property of Equality** *(propiedad de división de la igualdad)*

PRACTICE

show your work · label units

1. Solve each equation.

a. $12k = 60$ ___

b. $9m = 117$ ___

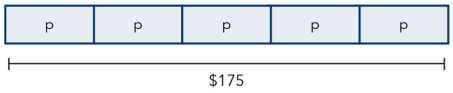
c. $11w = 88$ ___

d. $4y = 10$ ___

e. $15t = 90$ ___

f. $2r = 7$ ___

2. **Soccer Cleats.** A team spent \$175 on 5 pairs of cleats. Each pair cost the same, p dollars.



a. Write a multiplication equation. _____

b. Solve it. _____

c. Check by multiplying. _____

3. **Bookshelf Rows.** A bookshelf holds the same number of books on each of its 7 shelves. It holds 133 books in all. Write and solve an equation for b, the books on one shelf.

Hint *Shelves × books on one shelf = all books.*

Show your work.

Answer_____ books

4. Egg Cartons. A farm fills 15 cartons with e eggs each, 270 eggs in all. Solve $15e = 270$.

Hint *Divide both sides by 15.*

Show your work.

e =_____

5. Training Miles. A runner ran m miles each day for 14 days, 154 miles in all. Solve $14m = 154$.

Show your work.

m =_____

6. Car Wash. A car wash charges the same price for every car. Washing 24 cars brought in $336. Write and solve an equation for the price of one wash.

Hint *The number of cars is the coefficient.*

Show your work.

Price_____

7. Field Day Water. A crew fills 18 identical coolers. Together they hold 216 cups of water. Write and solve an equation for the cups in one cooler. Check it.

Hint *Check: 18 × your answer should be 216.*

Show your work.

Answer_____ cups

8. Concert Rows. A hall has r rows with 24 seats in each row. It has 648 seats in all.

a. Write and solve an equation for the number of rows. _____

b. Ten rows are removed for a stage. How many seats are left? _____

c. How can you check part a without dividing again? _____

FIND THE ERROR

explain the mistake, then fix it

9. Nadia's Work. To solve $5x = 65$, Nadia multiplied both sides by 5. She wrote $x = 325$. Explain her mistake. Then solve correctly.

_____

_____

_____

TEST PRACTICE

choose the best answer

10. Solve $8n = 96$.

A $n = 88$ **B** $n = 768$ **C** $n = 12$ **D** $n = 104$

11. In $4y = 28$, the number 4 is the –

A variable **B** coefficient **C** solution **D** total

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

35 P	18 O	19 R	27 T	11 D	12 C	140 Z	$14 U	$312 X	875 Q

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

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