Name_____ Date_____ Period_____

LESSON 8-2 · SESSION 1 · PRACTICE · FORM B

Addition Equations

Learning target – I can solve an addition equation by subtracting the same amount from both sides. · 6.EE.B.7

REMEMBER

- **Inverse operations** undo each other. Subtraction undoes addition.
- Subtract the same number from **both sides** to keep the equation balanced.
- **Check** by putting your answer into the original equation.

WORKED EXAMPLE

A team had some points, then scored 14 more and has 40. Solve $y + 14 = 40$.

Step 1 Subtract 14 from both sides: $y + 14 - 14 = 40 - 14$.

Step 2 Simplify: $y = 26$.

Step 3 Check: $26 + 14 = 40$.

Answer **$y = 26$ points**

WORDS **inverse operation** *(operación inversa)* · **isolate** *(aislar)* · **one-step equation** *(ecuación de un paso)*

PRACTICE

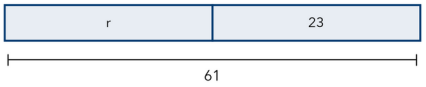
show your work · label units

1. Solve each equation.

a. $n + 27 = 64$ ___ **b.** $16 + p = 43$ ___ **c.** $x + 19 = 52$ ___

d. $y + 6.5 = 18$ ___ **e.** $m + 24 = 50$ ___ **f.** $w + 4.5 = 12$ ___

2. **Field Trip Seats.** A bus leaves school with r riders. At the next stop 23 more riders get on. Now there are 61 riders.



a. Write an addition equation. _____

b. Solve it. _____

c. Check your solution. _____

3. **Hiking Distance.** Mateo hiked 14.5 miles on Sunday. That was 4.5 miles more than he hiked on Saturday. Write and solve an equation for s, Saturday's miles.

Hint *Saturday's miles + 4.5 = Sunday's miles.*

Show your work.

Answer_____ miles

4. Aquarium Fish. A tank held f fish. The owner added 17 more. Then it held 63 fish. Solve $f + 17 = 63$.

Hint *Subtract 17 from both sides.*

Show your work.

f = _____

5. Savings Jar. Keisha had d dollars in a jar. She added $18. Then the jar held $81. Solve $d + 18 = 81$.

Show your work.

d = _____

6. Rainfall Total. A rain gauge held r inches on Monday. On Tuesday it caught 1.8 more inches. The total was 6.3 inches. Write and solve an equation.

Hint *Subtract 1.8 from both sides. Line up the decimal points.*

Show your work.

Answer _____ inches

7. Book Pages. Elijah read p pages last night. This morning he read 42 more pages, for 97 pages in all. Write and solve an equation. Check it.

Hint *Undo + 42 on both sides.*

Show your work.

Answer _____ pages

8. Savings Goal. A student saved s dollars. After earning $54 more, the total is $135.

a. Write an equation. _____

b. Solve it. _____

c. The student now wants $200 in all. Write and solve an equation for e, the extra amount needed. _____

FIND THE ERROR

explain the mistake, then fix it

9. Rashad's Work. To solve $y + 34 = 50$, Rashad added 34 to both sides. He wrote $y = 84$. Explain his mistake. Then solve correctly.

_____

_____

_____

TEST PRACTICE

choose the best answer

10. Solve $8 + b = 23$.

A $b = 31$ **B** $b = 15$ **C** $b = 8$ **D** $b = 184$

11. Solving an equation keeps it –

A larger **B** smaller **C** balanced **D** unequal

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

38	8.1	81	46	4.5	80	55	63	84	10
I	X	E	V	R	Z	S	E	Q	N

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

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