

Solving Equations Using Inverse Operations Name _____

Solve each of the following equations by using inverse operations. Show all work.

1. $x - 6 = 8$

2. $m + 4 = 13$

3. $7 \bullet v = 28$

4. $y \div 6 = 10$

5. $65 = t + 19$

6. $45 = n - 21$

7. $64 = 4 \bullet f$

8. $\frac{b}{8} = 4$

9. $r \div 11 = 11$

10. $19 + x = 81$

11. $h \bullet 8 = 8$

12. $z - 17 = 34$

13. $12 + x + 7 = 26$

14. $42 = 13 + x + 12$

Challenge:
15. $3x - 6 = 15$

Solve each of the following equations by using inverse operations. Show all work.

$$1. \quad x - 6 = 8$$

$$\cancel{+6} \quad \cancel{+6}$$

$$\boxed{x = 14}$$

$$2. \quad m + 4 = 13$$

$$\cancel{-4} \quad \cancel{-4}$$

$$\boxed{m = 9}$$

$$3. \quad 7 \cdot v = 28$$

$$\div 7 \quad \div 7$$

$$\boxed{v = 4}$$

$$4. \quad y \div 6 = 10$$

$$\cancel{\cdot 6} \quad \cancel{\cdot 6}$$

$$\boxed{y = 60}$$

$$5. \quad 65 = t + 19$$

$$\cancel{-19} \quad \cancel{-19}$$

$$\boxed{46 = t}$$

$$6. \quad 45 = n - 21$$

$$\cancel{+21} \quad \cancel{+21}$$

$$\boxed{66 = n}$$

$$7. \quad 64 = 4 \cdot f$$

$$\div 4 \quad \div 4$$

$$\boxed{16 = f}$$

$$8. \quad 8 \cdot \frac{b}{8} = 4 \cdot 8$$

$$\cancel{8} \quad \cancel{8}$$

$$\boxed{b = 32}$$

$$9. \quad r \div 11 = 11$$

$$\cancel{\cdot 11} \quad \cancel{\cdot 11}$$

$$\boxed{r = 121}$$

$$10. \quad 19 + x = 81$$

$$\cancel{-19} \quad \cancel{-19}$$

$$\boxed{x = 62}$$

$$11. \quad h \cdot 8 = 8$$

$$\cancel{\cdot 8} \quad \cancel{\cdot 8}$$

$$\boxed{h = 1}$$

$$12. \quad z - 17 = 34$$

$$\cancel{+17} \quad \cancel{+17}$$

$$\boxed{z = 51}$$

$$13. \quad \underline{12 + x + 7} = 26$$

$$\cancel{x + 19} \quad \cancel{-19}$$

$$\boxed{x = 7}$$

$$14. \quad 42 = \underline{13 + x + 12}$$

$$\cancel{42} \quad \cancel{x + 25}$$

$$\boxed{17 = x}$$

Challenge:

$$15. \quad 3x - 6 = 15$$

$$\cancel{+6} \quad \cancel{+6}$$

$$3x = 21$$

$$\div 3 \quad \div 3$$

$$\boxed{x = 7}$$