

Name _____

Inverse Property of Operations - Review Sheet

Part A: Addition & Subtraction Inverses

(Undo adding by subtracting, and subtracting by adding)

1. $x + 7 = 15$
2. $x - 12 = 9$
3. $x + (-8) = 3$
4. The sum of a number and 14 is 28. Write and solve an equation.
5. A number decreased by 11 equals 19.



Part B: Multiplication & Division Inverses

(Undo multiplying by dividing, and dividing by multiplying)

6. $4x = 20$
7. $\frac{x}{5} = 9$
8. $-3x = 12$
9. $\frac{x}{2} + 4 = 10$
10. A number multiplied by 6 equals 72.

Part C: Exponents & Roots - *(Undo exponents with roots, and roots with exponents)*

11. $x^2 = 49$
12. $x^3 = 27$
13. $\sqrt{x} = 9$
14. $\sqrt[3]{x} = 4$
15. $(x^2)^{\frac{1}{2}} = ?$

Part D: Other Inverse Operations - *(Negatives, reciprocals, and function inverses)*

16. Simplify: $-(-5)$
17. Simplify: $x \times \frac{1}{x}$ (for $x \neq 0$)
18. Simplify: $\frac{1}{\frac{1}{8}}$
19. If $f(x) = 3x + 2$, find $f^{-1}(x)$.
20. If $f(x) = x - 5$, find $f(f^{-1}(x))$.