



Worksheet: Solving Literal Equations

Instructions: Solve each equation for the indicated variable.

1. Solve for x : $(2y + 3x = 10)$

2. Solve for y : $(4x - 3y = 12)$

3. Solve for a : $(2b - 3a = 5)$

4. Solve for b : $(3a + 2b = 8)$

5. Solve for h : $(A = \frac{1}{2}bh)$

6. Solve for r : $(V = \frac{4}{3}\pi r^3)$

7. Solve for t : $(d = rt)$

8. Solve for p : $(A = p(1 + rt))$

9. Solve for c : $(F = \frac{9}{5}C + 32)$

10. Solve for C : $(K = C + 273.15)$

Remember: To solve a literal equation, isolate the indicated variable on one side of the equation using inverse operations. Treat letters as variables just like numbers.

Answers:

1. $(x = \frac{10 - 2y}{3})$

2. $(y = \frac{4x - 12}{3})$

3. $(a = \frac{2b - 5}{3})$

4. $(b = \frac{8 - 3a}{2})$

5. $(h = \frac{2A}{b})$

6. $(r = \sqrt[3]{\frac{3V}{4\pi}})$

7. $(t = \frac{d}{r})$

8. $(p = \frac{A}{1 + rt})$

9. $(c = \frac{5}{9}(F - 32))$

10. $(C = K - 273.15)$

Ensure that you perform the operations correctly when isolating the variable. Double-check your solutions by substituting them back into the original equations!