Name _____     Date _____

# Practice B
*For use with the lesson "Rewrite Equations and Formulas"*

**Write the equation in function form.**

**1.** $4x + y = -10$

**2.** $6 - y = 17x$

**3.** $y - 3x - 11 = 0$

**4.** $2x + 2y = 8$

**5.** $6x - 3y = 12$

**6.** $16 - 8y = 4x$

**7.** $5x - 7y = 14$

**8.** $9y - 4x - 9 = 0$

**9.** $15 + 3y = -24x$

**10.** $4 + 6y = 12x - 2$

**11.** $4 - 10y = 22 - 6x$

**12.** $8x - 2y - 5 = 11$

**Solve the literal equation.**

**13.** Solve $R = R_1 + R_2$ for $R_2$.

**14.** Solve $I = Prt$ for $r$.

**15.** Solve $C = \dfrac{Q}{V}$ for $V$.

**16.** Solve $y = mx + b$ for $m$.

**Solve the formula for the indicated variable.**

**17.** Area of a trapezoid: $A = \dfrac{h}{2}(b_1 + b_2)$. Solve for $h$.

**18.** Area of a rhombus: $A = \dfrac{1}{2}d_1 d_2$. Solve for $d_1$.

**19. Guitar Practice** You practice playing your guitar every day. You spend 15 minutes practicing chords and the rest of the time practicing a new song. So the total number of minutes $y$ you practice for the week is given by $y = 7(15 + x)$, where $x$ is the number of minutes you spend on practicing a new song.

   **a.** Solve the equation for $x$.

   **b.** How many minutes did you spend on a new song if you practiced 210 minutes last week? 245 minutes? 315 minutes?

**20. Discounts** Solve for $r$ in the formula $S = L - rL$ where $S$ is the sale price, $L$ is the list price, and $r$ is the discount rate.

   **a.** An item with a list price of $128 goes on sale for $51.20. Find the discount rate.

   **b.** An item with a list price of $56.80 goes on sale for $36.92. Find the discount rate.

**21. Cookbook** You bought a cookbook while on a recent trip overseas. All of the oven temperatures are in degrees Celsius and the only formula you can remember for temperature is how to convert Fahrenheit to Celsius: $C = \dfrac{5}{9}(F - 32)$.

   **a.** Solve the equation for $F$.

   **b.** A recipe tells you to bake a pie in the oven at 149°C. What is this temperature in degrees Fahrenheit? Round your answer to the nearest whole degree.