Solving for a Variable Homework

1) Solve
$$C = 2\pi r$$
 for r.
2) Solve $x + 3x - 5 = y - 3$ for y

3) $x - 6y = 8$ for x
4) $4x + 8 = 2y$ for x
5) $2x + 10y = 5$ for x

6)
$$-10 = 20y + 10x$$
 for y 7) $\frac{y+2}{5} = 3x$ for y 8) $\frac{y}{5} + 2 = 3x$ for y

Answer each of the following.

- 9) The formula c = 5p + 215 relates c, the total cost in dollars of hosting a birthday party at a skating rink, to p, the number of people attending.
 - a. Solve the formula c = 5p + 215 for p.
 - b. If Allie's parents are willing to spend \$300 for a party, how many people can attend?
- 10) The formula for the area of a triangle is $A = \frac{1}{2}bh$, where *b* represents the length of the base and *h* represents the height.
 - a. Solve the formula $A = \frac{1}{2}bh$ for *b*.
 - b. If a triangle has an area of 192 mm², and the height measures 12 mm, what is the measure of the base?

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