## Solving Equations with Multiple Variables Worksheet

Like Solving Equations with One Variable, But More Fun

1. 
$$4x - 8y = 16$$
. Find y when  $x = 2$ .

6. 
$$3(p+lw) = 2(l+pl+w)$$
. Solve for *l*.

2. 
$$5z + 3y = 25$$
. Find z when  $y = 4$ .

7. 
$$x(x^2 + 2) = 11$$
. Solve for  $x^3$ .

3. 
$$z^2 + \sqrt{x} + 36 = 0$$
. Find z when  $x = 9$ .

8. 
$$h(b_1 + b_2) = 2A$$
. Solve for  $b_1$ .

4. 
$$x^2 + 2y = 40$$
. Find x when  $y = 5$ .

9. 
$$\sqrt{u^2 + v^2} = 2uv$$
. Solve for  $v^2$ .

5. 
$$z^2 + 4(z+2) - 6 = 8z$$
. Solve for  $z^2$ .

10. The width of a rectangle is twice the length. If its area is 32 cm<sup>2</sup>, find the length.

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