Questions: Introduction to rearranging equations

Shanelle Advani, Tom Coleman

Summary

A selection of questions for the study guide on introduction to rearranging equations.

Before attempting these questions, it is highly recommended that you read Guide: Introduction to rearranging equations.

Q1

For each of the following equations, rearrange the equation for the variable given.

1.1. Rearrange $x = a + 2b$ for a.

1.2. Rearrange $x = a + 2b$ for b.

1.3. Rearrange $x - 2y + 4z = 4$ for z.

1.4. Rearrange $5x - 3y + 8z = -2$ for x.

1.5. Rearrange $5x - 3y + 8z = -2$ for y.

1.6. Rearrange $5x - 3y + 8z = -2$ for z.

1.7. Rearrange $x^2 + y^2 = 4$ for x.

1.8. Rearrange $\frac{x^2}{4} + \frac{y^2}{16} = a$ for x.

1.9. Rearrange $\frac{x^2}{4} + \frac{y^2}{16} = a$ for y.

1.10. Rearrange $\sqrt{x^2 - a^2} = y + 1$ for x.

1.11. Rearrange $\sqrt[3]{x^3 - a^3} = y + 1$ for a.

1.12. Rearrange $\sqrt[3]{x^3 - a^3} = y + 1$ for x.

1.13. Rearrange $x^4y^2 = a^3 + 2bcd$ for d.

1.14. Rearrange $x^4y^2 = a^3 + 2bcd$ for a.

1.15. Rearrange $x^4y^2 = a^3 + 2bcd$ for x.

1.16. Rearrange $\frac{1}{x} + 45 = ly^2$ for x.

Q2

In Guide: Introduction to rearranging equations, you saw the expression

$$5x^3y^3 + \frac{6z}{w^4} = 4abc^2$$

where you rearranged this equation for x.

Rearrange this expression for every other variable a, b, c, y, z, w.

After attempting the questions above, please click this link to find the answers.
