New Maths GCSE: A5 - Rearranging Formula with Fractions: Step-by-step

Name:... Date:..

Step 1

$$\frac{3}{x} = \frac{6}{y} - \frac{1}{z}$$

Which of the following is a good next step to make **z** the subject of the formula?

A $\frac{3z}{x} = \frac{6}{y} - 1$ **B** $\frac{3z}{xz} = \frac{6z}{yz} - \frac{z}{z^2}$

C $\frac{x}{3} = \frac{y}{6} - \frac{z}{1}$ **D** $\frac{3z}{x} = \frac{6z}{y} - 1$

Correct Answer: A B C D

Explanation:

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Step 2

$$\frac{3z}{x} = \frac{6z}{y} - 1$$

Which of the following is a good next step to make **z** the subject of the formula?

A $3z = \frac{6xz}{y} - x$ **B** $3xz = \frac{6xz}{xy} - x$

C $3z = \frac{6xz}{xy} - x$ **D** $3z = 6z - 1$

Correct Answer: A B C D

Explanation:

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Step 3

$$3z = \frac{6xz}{y} - x$$

Which of the following is a good next step to make **z** the subject of the formula?

A $3z = 6xz - x$ **B** $3yz = 6xz - xy$

C $3yz = 6xz - x$ **D** $3yz = 6xyz - xy$

Correct Answer: A B C D

Explanation:

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Step 4

$$3yz = 6xz - xy$$

Which of the following is a good next step to make **z** the subject of the formula?

A $0 = 6xz - xy - 3yz$

B $3z = 6z$

C $0 = 6xz - xy + 3yz$

D $yz = 2xz - xy$

Correct Answer: A B C D

Explanation:

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Step 5

$$0 = 6xz - xy - 3yz$$

Which of the following is a good next step to make **z** the subject of the formula?

A $xy = 3xyz$

B $0 = 3xyz - xy$

C $0 = 6z + 3z$

D $xy = 6xz - 3yz$

Correct Answer: A B C D

Explanation:

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Step 6

$$xy = 6xz - 3yz$$

Which of the following is a good next step to make **z** the subject of the formula?

A $1 = 6z - 3z$

B $xy = z(6x - 3y)$

C $xy = 6z(x - y)$

D $xy = 3(2xz - yz)$

Correct Answer: A B C D

Explanation:

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Step 7

$$xy = z(6x - 3y)$$

Which of the following is a good next step to make **z** the subject of the formula?

A $xy = 6xz - 3yz$ B $xy - (6x - 3y) = z$

C $\frac{xy}{z} = 6x - 3y$ D $\frac{xy}{6x-3y} = z$

Correct Answer: A B C D

Explanation:

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