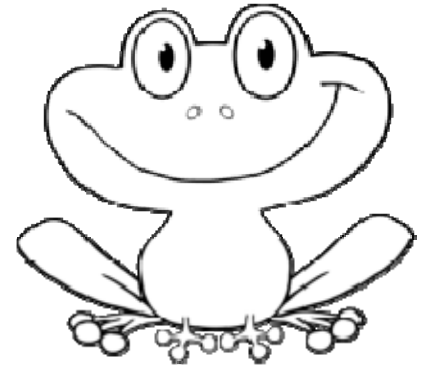


Solving Linear Equations and Inequalities in One Variable - Step-by-Step Lesson

Solve for z.

$$14z - 7z - 3 = 4$$



Explanation:

We have like terms, or terms that have the same variables raised to the same powers. To subtract like terms, subtract their coefficients.

$$14z - 7z - 3 = 4 \quad \text{Combine the z terms.}$$

$$7z - 3 = 4$$

Use inverse operations to isolate the variable. Add 3 to both sides:

$$7z - 3 + 3 = 4 + 3$$

$$7z = 7$$

$$z = \frac{7}{7} \quad \text{divide by 7 to solve for z}$$

$$z = 1 \quad \text{The answer is 1.}$$

