3.6: Solving Polynomial Equations with Fractional Coefficients (Day 1)

Warm Up

$-2(n+11)+4=12$

$3(2h-5)+4(3h+2)=11$

Example

$$\frac{x}{2}-2=-\frac{x}{3}$$

Steps

1) Multiply EACH term by the LOWEST COMMON DENOMINATOR.

2) Expand each term (watch out for negative signs – treat each term as though in brackets).

3) Simplify each side, then isolate the variable.

Examples

1. Find the value of the variable:

a) $3y = \frac{12}{4} + \frac{2y}{5}$

b) $\frac{3(2y-1)}{5} = \frac{y}{10}$

c) $\frac{-2(n+11)}{4} + \frac{4}{5} = \frac{12}{5}$

Homework: Equations Worksheet #1-15