

6.4 Solving Equations with Fractional Coefficients

Worksheet #1

Complete the following on a separate piece of paper!

A. Solve for the variable.

1) $3x - \frac{1}{4} = 2$

5) $-\frac{3}{4}z + 5 = -1$

2) $\frac{1}{3}r - 3 = -6$

6) $9t - \frac{3}{5} = -\frac{6}{5}$

3) $7x - \frac{5}{9} = 3$

7) $10t - \frac{2}{5} = \frac{3}{5}$

4) $\frac{2}{5}t + 3 = 11$

8) $\frac{1}{7}x - 1 = \frac{9}{7}$

B. Solve for the variable.

1) $\frac{a}{4} = \frac{1}{2}$

3) $\frac{1}{3} = \frac{-2x}{5}$

2) $\frac{x}{5} = \frac{-1}{2}$

4) $\frac{2}{3} = \frac{t}{6}$

C. Solve for the variable.

1) $\frac{y}{3} - \frac{2}{3} = 4$

6) $\frac{1}{2}x + \frac{1}{3}x = 10$

2) $\frac{2}{5}a + \frac{a}{2} = a - 2$

7) $\frac{a}{5} - a = \frac{1}{2}$

3) $\frac{1}{4}y - \frac{1}{2}y = 4$

8) $\frac{m}{6} - 5 = \frac{1}{2}m$

4) $\frac{2x}{3} = \frac{x}{2} - \frac{1}{4}$

9) $-\frac{1}{3}x + \frac{3}{4}x = 10$

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

10) $\frac{3}{5}x - \frac{3}{2}x = 10$

Answers:

A) 1) $\frac{3}{4}$ 2) -9 3) $\frac{32}{63}$ 4) 20 5) 8 6) $-\frac{1}{15}$ 7) $\frac{1}{10}$ 8) 16

B) 1) 2 2) $-2\frac{1}{2}$ 3) $-\frac{5}{6}$ 4) 4

C) 1) 14 2) 20 3) -16 4) $-1\frac{1}{2}$ 5) 60 6) 12 7) $-\frac{5}{8}$ 8) -15 9) 24 10) $-11\frac{1}{9}$