

Intermediate Algebra Skill

Solving Linear Equations Involving Fractions:

Solve the following linear equations.

$$1) \ 15 = \frac{-x}{4}$$

$$2) \ \frac{2}{7}x = 7$$

$$3) \ 5x = \frac{-3}{8}$$

$$4) \ \frac{m-6}{5} = 2$$

$$5) \ \frac{1}{3}(t-5) = -6$$

$$6) \ \frac{5}{6} = \frac{5t-4}{2}$$

$$7) \ \frac{x}{3} - \frac{3x}{4} = \frac{1}{12}$$

$$8) \ \frac{4}{9} = \frac{1}{3}(n-7)$$

$$9) \ \frac{3}{5}x - 2 = x + \frac{1}{3}$$

$$10) \ \frac{y}{5} + 2 = 3(y-4)$$

$$11) \ \frac{3}{5}(x-6) = \frac{2}{3}(3x-5)$$

$$12) \ \frac{1}{2}(2d+4) = \frac{1}{3}(4d-4)$$

$$13) \ \frac{3(2r-5)}{5} = \frac{3r-6}{4}$$

$$14) \ \frac{5}{12}(x+2) = \frac{2}{3}(2x+1) + \frac{1}{6}$$

$$15) \ \frac{a-5}{2} = \frac{3a}{4} + \frac{a-25}{6}$$

$$16) \ \frac{3(x-4)}{4} = \frac{5(2x-3)}{3}$$

$$17) \ \frac{2}{7}(5x+4) = \frac{1}{2}(3x-4) + 1$$

$$18) \ \frac{a-7}{3} = \frac{a+5}{2} - \frac{7a-1}{6}$$

$$19) \ \frac{2(2t-4)}{5} = \frac{3t+6}{4} - \frac{3}{2}$$

$$20) \ \frac{1}{5}(3s+4) = \frac{1}{3}(2s-8)$$

Answers to Solving Linear Equations Involving Fractions:

1) -60

2) $\frac{49}{2}$

3) $\frac{-3}{40}$

4) 16

5) -13

6) $\frac{17}{15}$

7) $-\frac{1}{5}$

8) $\frac{25}{3}$

9) $\frac{-35}{6}$

10) 5

11) $\frac{-4}{21}$

12) 10

13) $\frac{10}{3}$

14) 0

15) 4

16) $\frac{24}{31}$

17) 30

18) 5

19) 32

20) 52