

## 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)  $52$