

Name: _____

Period: _____

1.2 Solving Equations in One Variable

Solve each equation.

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

$$2) \frac{1}{3} + 2m = m - \frac{3}{2}$$

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

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

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

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

7) Solve for x.

$$\frac{1}{2}x + ax - 4 = \frac{bx + 2}{3}$$

8) Solve for x.

$$\frac{awx + x - 3}{2} = 0$$

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

$$10) \frac{1}{r-2} + \frac{1}{r^2-7r+10} = \frac{6}{r-2}$$

$$11) 1 = \frac{v+2}{v-4} + \frac{7v-42}{v-4}$$

$$12) \frac{r-4}{5r} = \frac{1}{5r} + 1$$

$$13) 1 + \frac{x^2-5x-24}{3x} = \frac{x-6}{3x}$$

$$14) 1 = \frac{1}{x^2+2x} + \frac{x-1}{x}$$

Determine if the equation is an identity or conditional.

$$15) x^3 - 2x = x(x - \sqrt{2})(x + \sqrt{2})$$

$$16) 5(2x+1) = 10x+1$$

$$17) (x+4)^2 - 5 = x^2 + 11$$

$$18) |x| = x$$