

Solving Mixed Algebraic Equations

Name: _____ Score: _____

Solve for each variable.

$$a - 20 = 40$$

$$3e + 3 = 33$$

$$5k^2 - 90 = 410$$

$$5x^2 + 10 = 30$$

$$3n^2 + 13 = 40$$

$$b - 20 = 30$$

$$n - 15 = -5$$

$$3q^1 + 5 = 35$$

$$-4a = 36$$

$$3d + 10d = 130$$

$$2x^2 - 4 = 4$$

$$t - 4 = 36$$

$$2r - 5 = 7$$

$$2y^2(4 - 2) = 16$$

$$-s + 26 = 6$$

$$s = 20$$

$$2n^1 + 20 = 26$$

$$-3b + 40 = -5$$

$$4c = -20$$

$$2q^2(2 + 1) = 216$$

$$y - 15 = 5$$

$$20 - 3f = 5$$

Answers

Solve for each variable.

$$a - 20 = 40$$

$$a = 60$$

$$3e + 3 = 33$$

$$e = 10$$

$$5k^2 - 90 = 410$$

$$k = 10$$

$$5x^2 + 10 = 30$$

$$x = 2$$

$$3n^2 + 13 = 40$$

$$n = 3$$

$$b - 20 = 30$$

$$b = 50$$

$$n - 15 = -5$$

$$n = 10$$

$$3q^1 + 5 = 35$$

$$q = 10$$

$$-4a = 36$$

$$a = -9$$

$$3d + 10d = 130$$

$$d = 10$$

$$2x^2 - 4 = 4$$

$$x = 2$$

$$t - 4 = 36$$

$$t = 40$$

$$2r - 5 = 7$$

$$r = 6$$

$$2y^2(4 - 2) = 16$$

$$y = 2$$

$$-s + 26 = 6$$

$$s = 20$$

$$2n^1 + 20 = 26$$

$$n = 3$$

$$-3b + 40 = -5$$

$$b = 15$$

$$4c = -20$$

$$c = -5$$

$$2q^2(2 + 1) = 216$$

$$q = 6$$

$$y - 15 = 5$$

$$y = 20$$

$$20 - 3f = 5$$

$$f = 5$$