

3-3 D2 Notes

Tuesday, 6 October 2026

13:58

$$43. 0 = \frac{8-2x}{5} \cdot 5$$

$$0 = 8 - 2x \quad -8 = -2x$$

$$\frac{-8}{-2} = \frac{-2x}{-2}$$

$$4 = x$$

$$51. (x-13) - (x-5) + 2x = 0$$

$$x - 13 - x + 5 + 2x = 0$$

$$-8 + 2x = 0$$

$$+8 \quad +8$$

$$2x = 8$$

$$\frac{2x}{2} = \frac{8}{2}$$

$$x = 4$$

$$55. 5m - 3[7(1-2m)] = 0$$

$$m = -18$$

$$5m - 3[7 + 14m] = 0$$

$$5m - 21 - 42m = 0$$

$$-37m - 21 = 0$$

$$-37m = 21$$

$$\frac{-37m}{-37} = \frac{21}{-37}$$

$$m = -\frac{21}{37}$$

$$57. 5(g-7) + 2[g-3(g-5)] = 0$$

$$5g - 35 + 2[-2g + 15] = 0$$

$$5g - 35 - 4g + 30 = 0$$

$$g - 5 = 0$$

$$+5 \quad +5$$

$$g = 5$$

$$44. 7 = \frac{4+9y}{7} \cdot 7$$

$$49 = 4 + 9y$$

$$-4 \quad -4$$

$$45 = 9y$$

$$\frac{9y}{9} = \frac{45}{9}$$

$$y = 5$$

$$52. (5-y) + (6-y) - (5-y) = 0$$

$$5 - y + 6 - y - 5 + y = 0$$

$$-y + 6 = 0$$

$$+y \quad +y$$

$$6 = y$$

$$56. \frac{1}{5}[4(k+2) - (3-k)] = 4$$

$$4k + 8 - 3 + k = 20$$

$$5k + 5 = 20$$

$$5k = 15$$

$$\frac{5k}{5} = \frac{15}{5}$$

$$k = 3$$

$$k - 1 = 4$$

$$+1 \quad +1$$

$$k = 5$$

$$58. 7n + 2[3(1-n) - 2(1+n)] = 14$$

$$7n + 2[3 - 3n - 2 - 2n] = 14$$

$$7n + 2[-3n - 1] = 14$$

$$7n - 6n - 2 = 14$$

$$-n - 2 = 14$$

$$+2 \quad +2$$

$$-n = 16$$

$$\frac{-n}{-1} = \frac{16}{-1}$$

$$n = -16$$