

Worksheet #7 Section 2.3 — Decimal Linear Equations

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Solve each equation leaving your final answer as a whole number or a fraction in reduced form.

(1)  $0.45x = 9$

(2)  $3.4 = -1.7y$

(3)  $a - 0.01a = 33$

(4)  $3.2x - 0.88 + 1.2x = 0$

(5)  $0.2x - 4.7 = 1.7x - 3.2$

(6)  $b - 5 + 0.2b = -0.2$

(7)  $0.3a - 7.8 = -2.3a$

(8)  $8.1 - 0.6t = 7.2$

(9)  $3n - 2.07n + 4.65 = 0$

(10)  $4.1a - 2.3a + 1.4a = 17.3 + 21.1$

(11)  $0.27s + 8.3 = 2.7s + 1.01$

(12)  $0.2(4x - 1.5) = 15.7$

(13)  $-6.4 - 7.1a = -1.7a - 55$

(14)  $0.21(3z - 11) = 5.88$

(15)  $1.5 - 0.5(2x - 17) = 9.7$

(16)  $0.9t - 0.1(50 - t) = 12$

(17)  $8.2y - 1.05 = 5.3y - 2.5$

(18)  $-3.2a = -96$

(19)  $-2.1(3a - 10) = -1.05$

(20)  $30 - 30(0.2z - 12) = 12$

(21)  $0.12(x - 200) + 0.2(x + 110) = 62$

(22)  $0.4(3x - 15) = 0$

(23)  $2.15 - 0.3(2s - 8) = 0.4s - 2.45$

(24)  $0.9(x - 0.2) = -7.38$

(25)  $7.92 = 1.1(2a - 4.8)$

(26)  $0 = 3.4 - 0.17z$

(27)  $0.19(x - 100) - 0.11(x + 200) = 23$

(28)  $0.3(2y - 12) - 0.5(y - 20) = 3.4$

(29)  $0.3(0.2x - 20) = 0.2(0.5x - 20)$

(30)  $0.07z = -0.72 - 5(0.3z - 1.4)$

Answers: (1) 20 (2) -2 (3)  $\frac{100}{3}$  (4)  $\frac{1}{5}$  (5) -1 (6) 4 (7) 3 (8)  $\frac{3}{2}$   
(9) -5 (10) 12 (11) 3 (12) 20 (13) 9 (14) 13 (15)  $\frac{3}{10}$  (16) 17 (17)  $-\frac{1}{2}$   
(18) 30 (19)  $\frac{7}{2}$  (20) 63 (21) 200 (22) 5 (23) 7 (24) -8 (25) 6 (26) 20  
(27) 800 (28) -30 (29) -50 (30) 4