

Name: Answer Key
A. Zito

Date: _____
Math Review

Solve and Check
(Show all your work)

a)	$2x + 14 - 3 = 25$ $2x + 11 = 25$ $2x = 25 - 11$ $2x = 14$ $\frac{2x}{2} = \frac{14}{2}$ $x = 7$	$2(7) + 14 - 3 = 25$ $14 + 14 - 3 = 25$ $25 = 25 \checkmark$
b)	$17 - 4x + 13 = 22$ $-4x + 30 = 22$ $-4x = 22 - 30$ $-4x = -8$ $\frac{-4x}{-4} = \frac{-8}{-4}$ $x = 2$	$17 - 4(2) + 13 = 22$ $17 - 8 + 13 = 22$
c)	$15 - 12 + 3x = 7 - 28$ $3 + 3x = -21$ $3x = -21 - 3$ $\frac{3x}{3} = \frac{-24}{3}$ $x = -8$	$15 - 12 + 3(-8) = 7 - 28$ $3 - 24 = -21$ $-21 = -21$
d)	$3x - 4 + 17 = 6x - 5$ $3x + 13 = 6x - 5$ $3x - 6x = -5 - 13$ $\frac{-3x}{-3} = \frac{-18}{-3}$ $x = 6$	$3(6) - 4 + 17 = 6(6) - 5$ $18 - 4 + 17 = 36 - 5$ $31 = 31$
e)	$14 - 2 + 12x = 63 - 8 - 31x$ $12 + 12x = 55 - 31x$ $12x + 31x = 55 - 12$ $\frac{43x}{43} = \frac{43}{43}$ $x = 1$	$14 - 2 + 12(1) = 63 - 8 - 31(1)$ $14 - 2 + 12 = 63 - 8 - 31$ $24 = 24$

f)	$2x - 6 - 7 = 14 - 3x$ $2x - 13 = 14 - 3x$ $2x + 3x = 14 + 13$ $\frac{5x}{5} = \frac{27}{5}$ $x = 5.4$	$2(\quad) - 6 - 7 = 14 - 3(\quad)$ $10.8 - 6 - 7 = 14 - 16.2$ $-2.2 = -2.2$
g)	$-3x + 4 = -17 + x + 1$ $-3x + 4 = -16 + x$ $-3x - x = -16 - 4$ $\frac{-4x}{-4} = \frac{-20}{-4}$ $x = 5$	$-3(5) + 4 = -17 + (5) + 1$ $-15 + 4 = -11$ $-11 = -11$
h)	$14 - (-2x) + (13 - 5) = 66$ $14 + 2x + 8 = 66$ $2x + 22 = 66$ $2x = 66 - 22$ $2x = 44$ $\frac{2x}{2} = \frac{44}{2}$ $x = 22$	$14 - (-2(\quad)) + (13 - 5) = 66$ $14 - (-2(22)) + (13 - 5) = 66$ $14 - (-44) + 8 = 66$ $14 + 44 + 8 = 66$
i)	$15 - (8 + 3x) - 8 = 14 + 3x$ $15 - 8 - 3x - 8 = 14 + 3x$ $-3x - 1 = 14 + 3x$ $-3x - 3x = 14 + 1$ $\frac{-6x}{-6} = \frac{15}{-6}$ $x = -2.5$	$15 - (8 + 3(\quad)) - 8 = 14 + 3(\quad)$ $15 - (8 + 7.5) - 8 = 14 + 3(2.5)$ $15 - 8 + 7.5 - 8 = 14 - 7.5$ $6.5 = 6.5$
j)	$-9 - 4(x - 8) = 15 + x$ $-9 - 4x + 32 = 15 + x$ $-4x + 23 = 15 + x$ $-4x - x = 15 - 23$ $\frac{-5x}{-5} = \frac{-8}{-5}$ $x = 1.6$	$-9 - 4(1.6 - 8) = 15 + (1.6)$ $-9 - 4(-6.4) = 15 + 1.6$ $-9 + 25.6 = 16.6$ $16.6 = 16.6$
k)	$17 - 6 + (-5x + 2x - (-3)) = -x + 2$ $11 + (-3x + 3) = -x + 2$ $11 - 3x + 3 = -x + 2$ $-3x + 14 = -x + 2$ $-3x + x = 2 - 14$ $\frac{-2x}{-2} = \frac{-12}{-2}$ $x = 6$	$17 - 6 + (-5(6) + 2(6) - (-3)) = -(6) + 2$ $11 + (-30 + 12 + 3) = -6 + 2$ $11 + (-15) = -4$ $-4 = -4$

$$x = 6$$