Answers for Day 3. 25th March 2020. Activity Hillside MTC Pg 55

a) $\frac{(2h-2)}{2} = \frac{(h-9)}{3}$

LCM for 2 and 3 = 6

$\frac{3}{\cancel{6}} \times \frac{(2h-2)}{\cancel{2}_1} = \frac{\cancel{6}^2(h-9)}{\cancel{3}_1}$

$3\times 2h - 3\times 2 = 2\times h - 2\times 9$

$6h - 6 = 2h - 18$

$6h - 2h - 6 = 2h - 2h - 18$

$4h - 6 = 0 - 18$

$4h - 6 = 18$

$4h - 6 + 6 = 18 + 6$

$4h = 24$

$\frac{\overset{1}{\cancel{4}}h}{\cancel{4}_1} = \frac{24^6}{\cancel{4}_1}$

$h = 6$ ✓

b) $\frac{2p-2)}{3} = \frac{(2p-2}{5})$

LCM of 3 and 5 = 15

$\frac{15^5 \times (2p-2)}{\cancel{3}_1} = \frac{15^3 \times (2p-2)}{\cancel{5}_1}$

$5\times 2p - 5\times 2 = 6p - 6$

$10p - 10 = 6p - 6$

$10p - 6p - 10 = 6p - 6p - 6$

$4p - 10 = 0 - 6$

$4p - 10 = -6$

$4p - 10 + 10 = -6 + 10$

$4p + 0 = 4$

$\frac{4p}{4} = \frac{4}{4}$

$p = 1$ ✓

c)

c) $\frac{b+3}{3} = \frac{b+2}{4}$

LCM of 3 and 4 = 12

$\frac{4}{12} \times \frac{(b+3)}{3_1} = \frac{3}{12} \frac{(b+2)}{4_1}$

$4 \times b + 4 \times 3 = 3 \times b + 3 \times 2$

$4b + 12 = 3b + 6$

$4b - 3b + 12 = 3b - 3b + 6$

$b + 12 = 0 + 6$

$b + 12 - 12 = 6 - 12$

$b + 0 = -6$

$b = -6$ ✓