1.3 Open sentences

EX: Find the solution set for the equation if the replacement set is $\{0, 1, 2, 3\}$.

~~8888888~~ $8m - 7 = 17$

sorry! ↗
☺

$8(0) - 7 = 17$ $8(2) - 7 = 17$

$0 - 7 \neq 17$ $16 - 7 \neq 17$ $\boxed{\{3\}}$

$8(1) - 7 = 17$ $8(3) - 7 = 17$

$8 - 7 \neq 17$ $24 - 7 = 17$

EX: Solve $x = \dfrac{3^2 - (7-5)}{3(4)+(2+1)} = \boxed{\dfrac{7}{15}}$

PEMDAS

TOP: $3^2 - (7-5)$ Bottom: $3(4) + (2+1)$
$\quad\quad 3^2 - (2)$ $\quad\quad 3(4) + 3$
$\quad\quad 9 - 2$ $\quad\quad 12 + 3$
$\quad\quad\quad 7$ $\quad\quad\quad 15$

EX: Find the solution set for the inequality if the replacement set is $\{5, 6, 7, 8\}$.

$30 + n \geq 37$ $\boxed{\{7, 8\}}$

$30 + 5 \geq 37$ $30 + 7 \geq 37$
$\quad 35 \ngeq 37$ $\quad 37 \geq 37$

$30 + 6 \geq 37$ $30 + 8 \geq 37$
$\quad 36 \ngeq 37$ $\quad 38 \geq 37$