

### Solving Equations : Higher Ordered Thinking

1. Is the equation  $2(x - 2) + 12 = 6x$  equivalent to  $4x = 8$  ?

2. Show if  $10y + 3y - 1 = 12 + -8 + 2y$  is equivalent to  $14 = 11y$

4. Determine if  $-(a - 8) = 12$  has the same solution to  $(a - 8) = -12$

5. For the equation  $\frac{4}{3}x = 6$

a) Show how to solve the equation.

b) Explain why you needed to multiplying both sides by the reciprocal of the coefficient.

6. Show two ways of solving the equation  $\frac{x}{2} + 3 = 5$