

## Review Pg. 84#16b

### U2L6 – 1.8 Solving a Linear System Using Algebra: Substitution

Students will learn to use the algebraic method of substitution to solve a linear system of equations.

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#### Examples

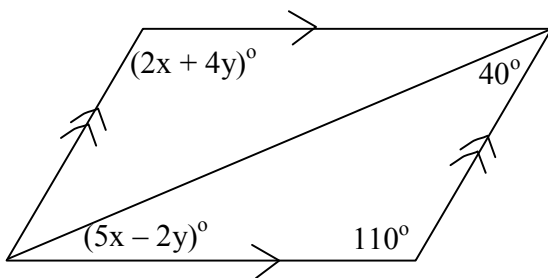
1. Use substitution to solve the linear system below.

$$y = 5x - 2$$

$$6x + 3y = 36$$

2. Guarantee Pool Repair charges \$50 for a service call, plus \$40/h for labour. Aqua Pools & Spa charges \$30 for a service call, plus \$45/h for labour. Find the length of a service call for which both companies charge the same amount.

3. Use the diagram and your knowledge of parallelograms to find the value of  $x$  and  $y$ .



4. A rectangle has vertices  $A(2,2)$ ,  $B(2,6)$ ,  $C(4,6)$ , and  $D(4,2)$ . Develop an algebraic solution to determine the coordinates of the point of intersection of the diagonals.