1. Give ***one example*** of each of the following: (/5)

    (a) Expression   _____

    (b) Equation that is Solved for the Unknown   _____

    (c) Equation that Expresses a Mathematical Relationship   _____

    (d) Identity   _____

    (e) A Value that Satisfies the Equation $x^2 = 64$ _____

$\dfrac{}{41}$

2. For the given equation, complete the flowchart, solve the equation by performing operations to ***both sides*** and check your solution. (/10)

Equation	*Flowchart*	*Solve the Equation by Performing Operations to B.S.*	*Check your Solution*	
			L.H.S.	R.H.S.
$\dfrac{3}{2}x + \dfrac{1}{2} = \dfrac{3}{4}$				

3. Solve the given equation by performing operations to both sides. (/9)

$$\frac{1}{4}(2y - 7) + \frac{y - 5}{6} = -3 - (5y - 8)$$

4. Two or more angles are complementary if their sum is 90°. In the diagram at the right, three angles are complementary. One angle is ***one-half*** of the largest angle. The smallest angle is ***one-sixth*** of the largest angle. ***Use an equation*** to find the measure of each angle. (/7)
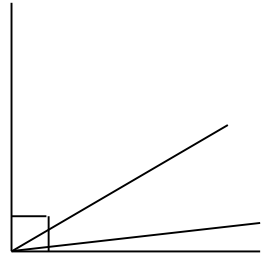
5. The triangles shown below have the ***same perimeter***. ***Use an equation*** to find the side lengths of each triangle. (/10)

$\frac{3}{4}x$ $\frac{3}{4}x$

$\frac{3}{4}x$

$\frac{1}{2}x+1$ $\frac{1}{2}x+1$

$\frac{1}{4}x+\frac{1}{2}$