

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 $x^2 = 64$ _____

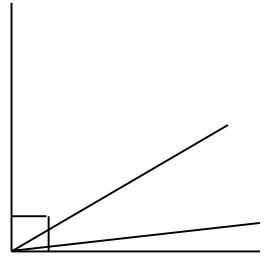
2. For the given equation, complete the flowchart, solve the equation by performing operations to *both sides* and check your solution. (/10)

Equation	Flowchart	Solve the Equation by Performing Operations to B.S.	Check your Solution	
(a) $\frac{3}{2}x + \frac{1}{2} = \frac{3}{4}$	<div><div>x</div><div></div></div>		L.H.S.	R.H.S.
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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)

