

P.S. #3.3 - Solving Equations With Variables on Both Sides

Name: _____ Class: _____

Solve the following equations.

1.) $9m + 14 = 2m$

2.) $7p - 5 = 6p + 8$



3.) $12 - 5h = h + 6$

4.) $3x - 32 = -7x + 28$

5.) $4a - 10 = a + 3a - 2a$

6.) $\frac{2p}{3} + \frac{p}{4} - \frac{1}{6} = \frac{7}{2}$

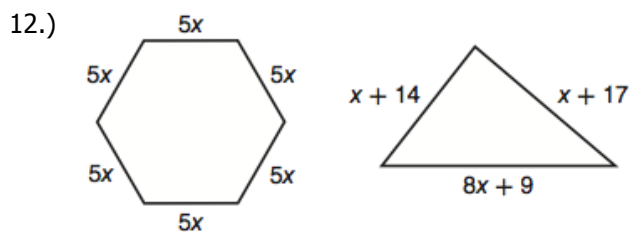
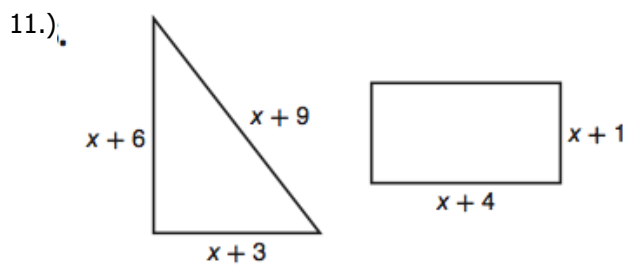
7.) $\frac{2x}{3} + \frac{1}{3} - \frac{x}{3} = \frac{2}{3}$

8.) $\frac{3x-2}{8} + \frac{2-x}{4} = -\frac{1}{2}$

9.) Define a variable, write an equation, and solve to find the number. "Fourteen less than five times a number is three times the number."

10.) $-(1 + 7x) - 6(-7 - x) = 36$

For 11 – 12, write an equation to find the value of x so that the two figures have the same perimeter. Then, solve.



Answers:

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|--------|--------|--------|---------|
| 1.) -7 | 2.) 13 | 3.) 1 | 4.) 6 |
| 5.) 5 | 6.) 4 | 7.) 1 | 8.) -6 |
| 9.) -7 | 10.) 5 | 11.) 8 | 12.) 20 |