

One, None, All Solutions

Solve all equations. Show all your work clearly and circle your answer. Some equations may have one solution, no solution, or All Real Numbers (infinite solutions). **Hint: If you solved all ten problems correctly 3 questions will have no solution, 3 questions will have infinite solutions, and the sum of the remaining solutions is 6.**

1. $2n + 4 = 4 - 4n$

2. $3n - 6 = n + 4$

3. $-2 - 7r = -1 - 7r$

4. $1 + 4x = -4 + 4x$

5. $13 - 7r = 4 + 2r$

6. $-5 - 7n = -7n + 3$

7. $4x - 6 = -6 - 4x$

8. $n + 5 = n + 7 - 3 + 1$

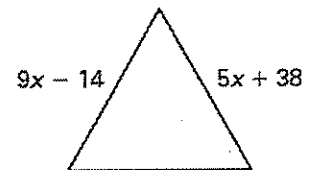
9. $7 + 4b - 4b = 7 + 5b - 5b$

10. $n + 1 = n + 1$

Word Problems: Write an algebraic model whenever possible then solve. If you get stumped try drawing a picture or rewriting the problem.

11. A It takes 70 inches of ribbon to make a bow and wrap the ribbon around a box. The bow takes 3 inches of ribbon. The width of the box is 14 inches. What is the height of the box?

12. Find the value of x for the equilateral triangle (all sides are equal). Then find its perimeter.



Solving with Fraction Coefficients A

One-Step Solving:

Two - Step Solving:

1) $\frac{1}{2}x = 8$ _____

2) $\frac{1}{3}x = 10$ _____

3) $\frac{2}{3}x = 16$ _____

4) $\frac{3}{5}x = 14$ _____

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5) $\frac{1}{2}x - 6 = -1$ _____

6) $\frac{1}{3}x - 2 = 3$ _____

7) $\frac{2}{3}x - 2 = 10$ _____

8) $\frac{3}{5}x - 35 = -5$ _____