Solve each equation, showing work. Beside each problem, write the steps you are doing.

1.
$$13x + 2 = 4x + 38$$

2.
$$7c + 12 = -4c + 78$$

Solve each equation. Check your solution.

3.
$$2m - 13 = -8m + 27$$

4.
$$9x - 4 = 2x + 3$$

5.
$$6 + 3t = 8t - 14$$

6.
$$\frac{3}{5}f + 24 = 4 - \frac{1}{5}f$$

6.
$$\frac{3}{5}f + 24 = 4 - \frac{1}{5}f$$
 7. $\frac{1}{12} + \frac{3}{8}y = \frac{5}{12} + \frac{5}{8}y$

8.
$$3w + 2 = 7w$$

9.
$$3(3m-2) = 2(3m+3)$$

10.
$$6(3a+1)-30=3(2a-4)$$

11.
$$\frac{1}{8}(3d-2) = \frac{1}{4}(d+5)$$

12.
$$6.78j - 5.2 = 4.33j + 2.15$$

13.
$$14.2t - 25.2 = 3.8t + 26.8$$

14.
$$3.2k - 4.3 = 12.6k + 14.5$$

15.
$$\frac{b-4}{6} = \frac{b}{2}$$

16.
$$3(2x-7) = 5x + 4$$

17.
$$(2m-2)-(3m+1)=7m-5$$

18.
$$8m - 3 - 3m = 4(3m + 1)$$

19. Find the value of *x* so that the figures have the same perimeter.



