Multi-step equations

Check list

Step 1 Parenthesis (combine anything you can)

Step 2 Distribute (multiply # on outside by both inside parenthesis)

Step 3 Combine like terms on each side of the equal sign

Step 4 Get variables on one side (try getting rid of the smaller one)

Step 5 Get remaining variable alone (2 step equation)

"Fill in the blanks by showing work.

Use / for divide, + to add, - to divide, and x to multiply. No spaces."

Example: $3x - 10 = 38$

$+10 = +10$

$3x = 48$

$/3 = /3$

$x = 16$

Example: $2(x - 4) = 8x + 16$

$2x - 8 = 8x + 16$

$-2x = -2x$

$-8 = 6x + 16$

$-16 = -16$

$-24 = 6x$

$/6 = /6$

$-4 = x$

1. $3 + 2k = 35$

$= -3$

$= 32$

$= /2$

$k =$

2. $11 = -5 - 2v$

$=$

$= -2v$

$=$

$= v$

3. $3 = \frac{r}{2} - 7$

$=$

$= \frac{r}{2}$

$=$

$= r$

4. $-7 = -8 + \frac{b}{4}$

$=$

$= \frac{b}{4}$

$=$

$= b$

5. $91 = 7(n + 7)$

    $= \quad +$

    $-49 =$

    $=$

    $=$

    $= n$

6. $3(1 - 5x) - 8 = 85$

    $- \quad x - 8 =$

    $-15x = 85$

    $=$

    $= 90$

    $=$

    $x =$

7. $x + 8 = 16 + 2x$

    $=$

    $= 16 +$

    $=$

    $= x$

8. $4 + 5m = -10 - 2m$

    $=$

    $+ 7m =$

    $=$

    $= -14$

    $=$ $=$

    $m =$

Click which step has mistake?

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

    Step 1 $4 + 3x - 9 = 2x - 9$

    Step 2 $3x - 5 \;\; = 2x - 9$

    Step 3 $x - 5 \;\; = -9$

    Step 4 $x = -14$

    What should x =? _____

10. $-26 + 2a = -(2 - 4a)$

    Step 1 $-26 + 2a = -2 + 4a$

    Step 2 $-26 \quad\;\; = -2 + 6a$

    Step 3 $-24 = 6a$

    Step 4 $-4 \;\; = a$

    What should a =? _____