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

   $=$

   $= \frac{b}{4}$

   $=$

   $= b$

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

$=$

$+ 7m =$

$=$

$= -14$

$=$ $\quad =$

$m =$

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 $-26 = -2 + 6a$

Step 3 $-24 = 6a$

Step 4 $-4 = a$

What should a =? _____

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