

pg. 135; 3-15 (a) · 25 · 39 (b): 57, 58, 59

③ not linear: exponent
of variable is 2, not 1

④ linear

⑤ linear

⑥ not linear: exponent
of variable is 2, not 1

⑦ -1

⑧ 13

⑨ -17

⑩ 5

⑪ 4

⑫ 8

⑬ 3

⑭ -13

⑮ -3

⑯ 9

⑰ -5

⑱ 10

⑲ 8

⑳ -4

㉑ 24

㉒ -15

㉓ -24

3.3. Solving Multi-Step Equations

Dec. 04, 2006

ex1) $3x + 7 = 19$ * get 'x' by itself

Script

$$x \xrightarrow{*3} 3x \xrightarrow{+7} 3x+7$$

Order of operations

What we do to 'x'

$$4 \xleftarrow{:3} 12 \xleftarrow{-7} 19$$

$x = 4$

Inverse Operations
What we do to the #

Vertical

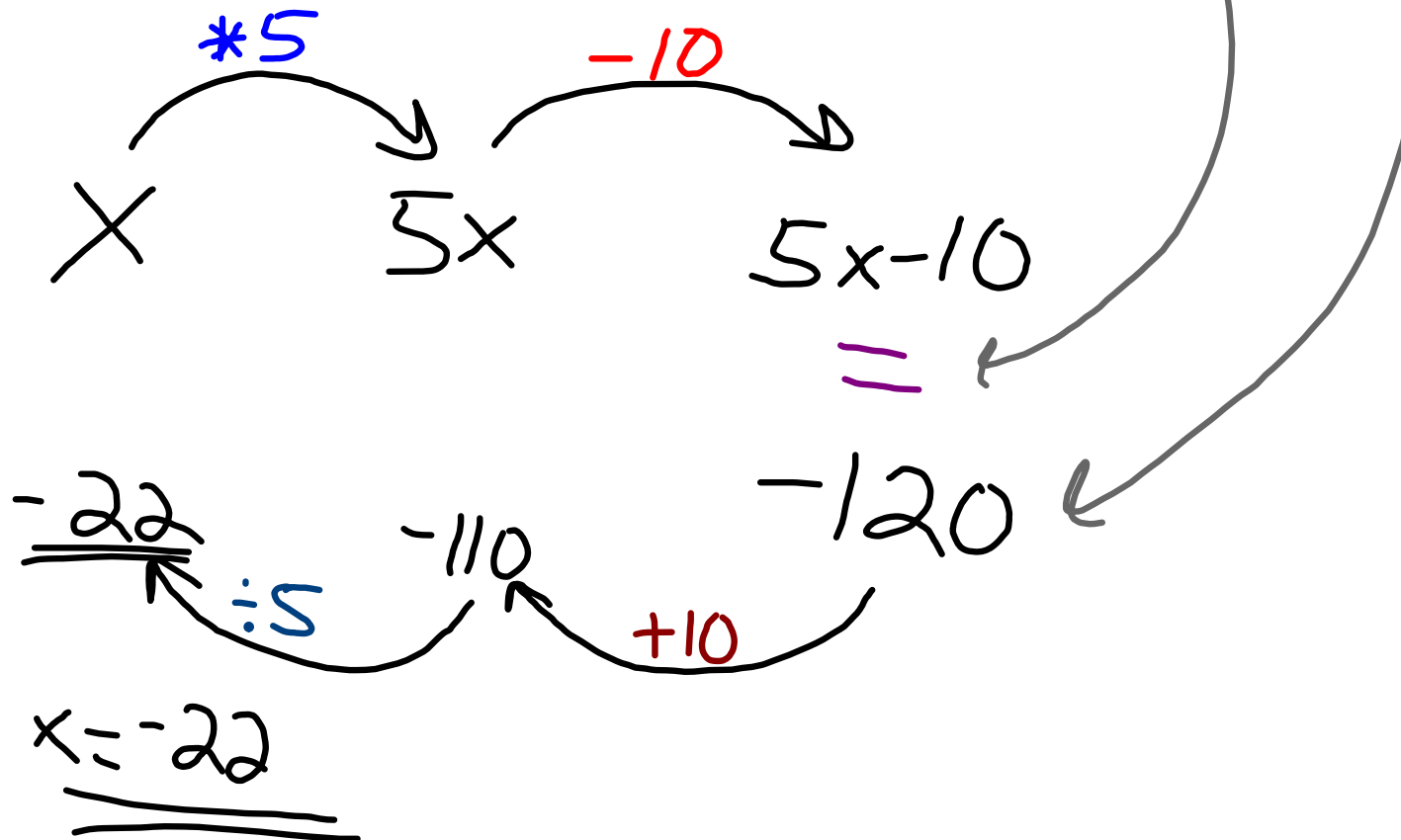
$$\begin{array}{r} 3x + 7 = 19 \\ -7 \quad -7 \\ \hline 3x = 12 \\ \underline{3} \quad \underline{3} \end{array}$$

$x = 4$

ex2)

$$5x - 10 = -120$$

Script



ex2)
Vertical

$$\begin{array}{r} 5x - 10 = -120 \\ +10 \quad \quad +10 \\ \hline 5x = -110 \\ \hline x = -22 \end{array}$$

$$\underline{\underline{x = -22}}$$

Lee

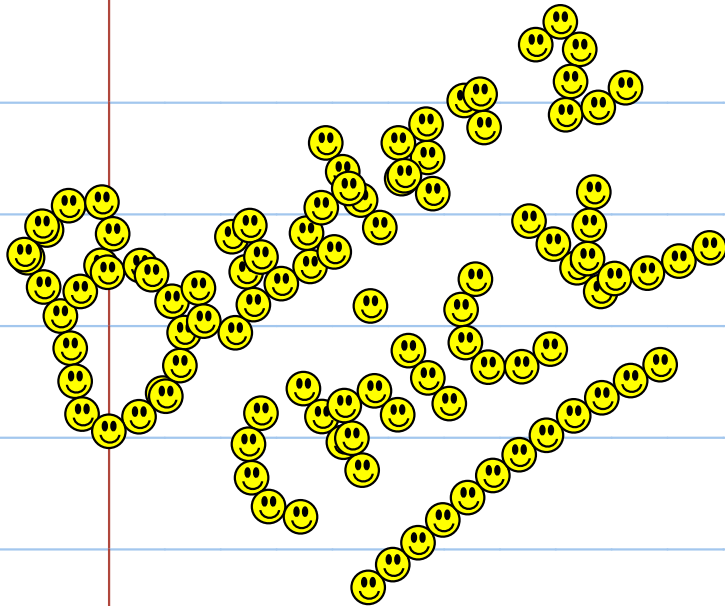
Angela

ex 3

Vertical

$$\begin{array}{r} 7x - 3x - 8 = 24 \\ 4x - 8 = 24 \end{array}$$

$$\begin{array}{r} + 8 \quad + 8 \\ \hline 4x = 32 \\ \hline 4 \quad 4 \\ \hline x = 8 \end{array}$$



ex 4)

$$8x - 2(x + 7) = 16$$

$$8x - 2(x) + 2(7) = 16$$

$$8x - 2x - 14 = 16$$

$$\begin{array}{r} 6x - 14 = 16 \\ + 14 \quad + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 6x = 30 \\ \hline 6 \quad 6 \end{array}$$

$$\underline{\underline{x = 5}}$$



par
13

ex 5) $4 = \frac{2}{3}(x+3)$

$$4 = \frac{2}{3}(x) + \frac{2}{3}(\underline{3})$$

$$4 = \frac{2}{3}x + 2$$

$$\begin{array}{r} -2 \\ \hline \frac{3}{2} \cdot \frac{2}{1} = \frac{3}{2} \left(\frac{2}{3}x \right) \end{array} \quad 2 = \frac{2}{3}x$$

$$\underline{\underline{3 = x}}$$

$$\frac{3}{2} \cdot \frac{4}{1} = \frac{3}{2} \left(\frac{2}{3} (x+3) \right)$$

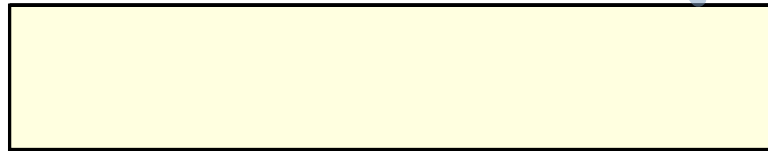


$$\begin{array}{r} 6 = x + 3 \\ -3 \quad -3 \\ \hline \underline{3 = x} \end{array}$$

Real Life Math:

- There is going to be a Concert in Cleveland.
- Gund Arena: 26,247 people
- CSU : 21,650 people.

*How many more seats have to be added to CSU to have as many Seats as Gund?



O.T.L.

① pg 144 : Checkpoint: 1-3
pg 146 : Checkpoint: #5

② ^{DO &} Turn in ^{pg 130} Ch. Readiness Quiz
~~Today~~ Tomorrow also



HW ④ pg 147-148:

19-43 (odd)

* ^{Hint.} use ex. 2 on pg 145 to
help with #43

⑤ pg 135: 26-38 (even)

⑥ pg 141-142: 18-48 (even)

will be checked & collected