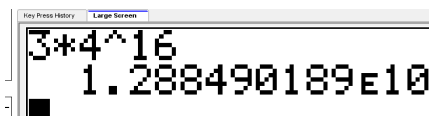


p. 605 #41 3, 12, 48, 192, ... a_n ...
 #41 17th term a_{17} ($n=17$)

explicit: $a_n = a_1 \cdot r^{n-1}$ $a_1 = 3$
 $r = 4$

$$a_{17} = 3 \cdot 4^{17-1}$$

$$= 3 \cdot 4^{16}$$



$$= 12884901890 \times 10^{10}$$

$$12884901890$$

p. 605 #43

3, 12, 48, 192, ...

$a_1, a_2, a_3, a_4, \dots, a_n, \dots$

explicit formula:
 (geometric)

$$a_n = a_1 \cdot r^{n-1}$$

$$a_n = 3 \cdot 4^{n-1}$$

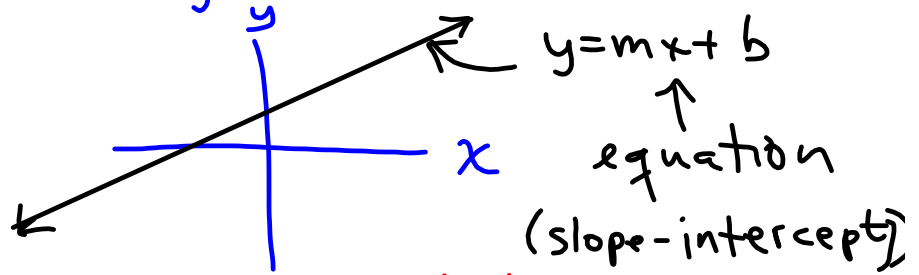
\uparrow
 n^{th}

Topic: Systems of Linear Equations

Q: What is a s. of l.e.?

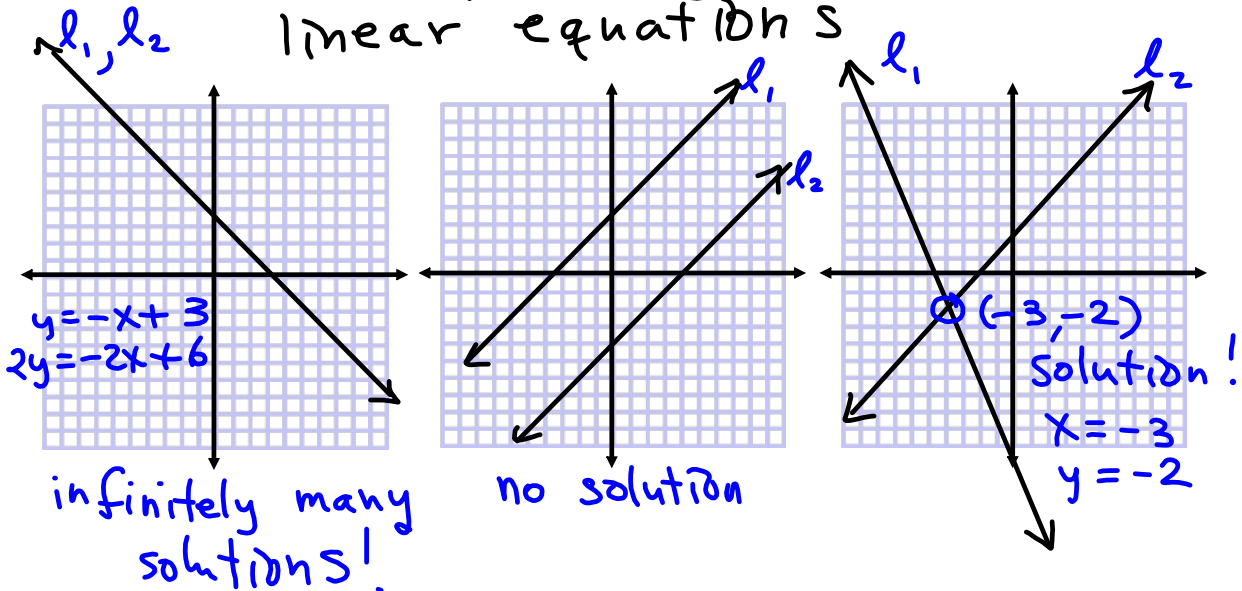
A: more than 1 linear equation

linear equations graph as straight lines in x-y space



system: more than 1 line

3 ways of having system of 2 linear equations



Example:

$l_1: y = 2x - 1$

$l_2: 2y = 4x - 2$

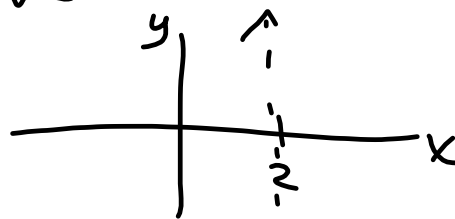
(x_1, y_1) "solves" a system

when you can substitute

$\left. \begin{array}{l} x = x_1 \\ y = y_1 \end{array} \right\}$ into both equations and
get a true statement,
like $3 = 3$

Before graphing, consider:

① $x = 2$ (no y in equation)
vertical line



② put equation in form
 $y = mx + b$

#7 p. 150

$$y = x - 2$$

$$y = -2x + 7$$

