

Bellwork to complete alone:

Error Analyses
in TRAY!

Graph on the same axes. Find the intersection point of the lines also.

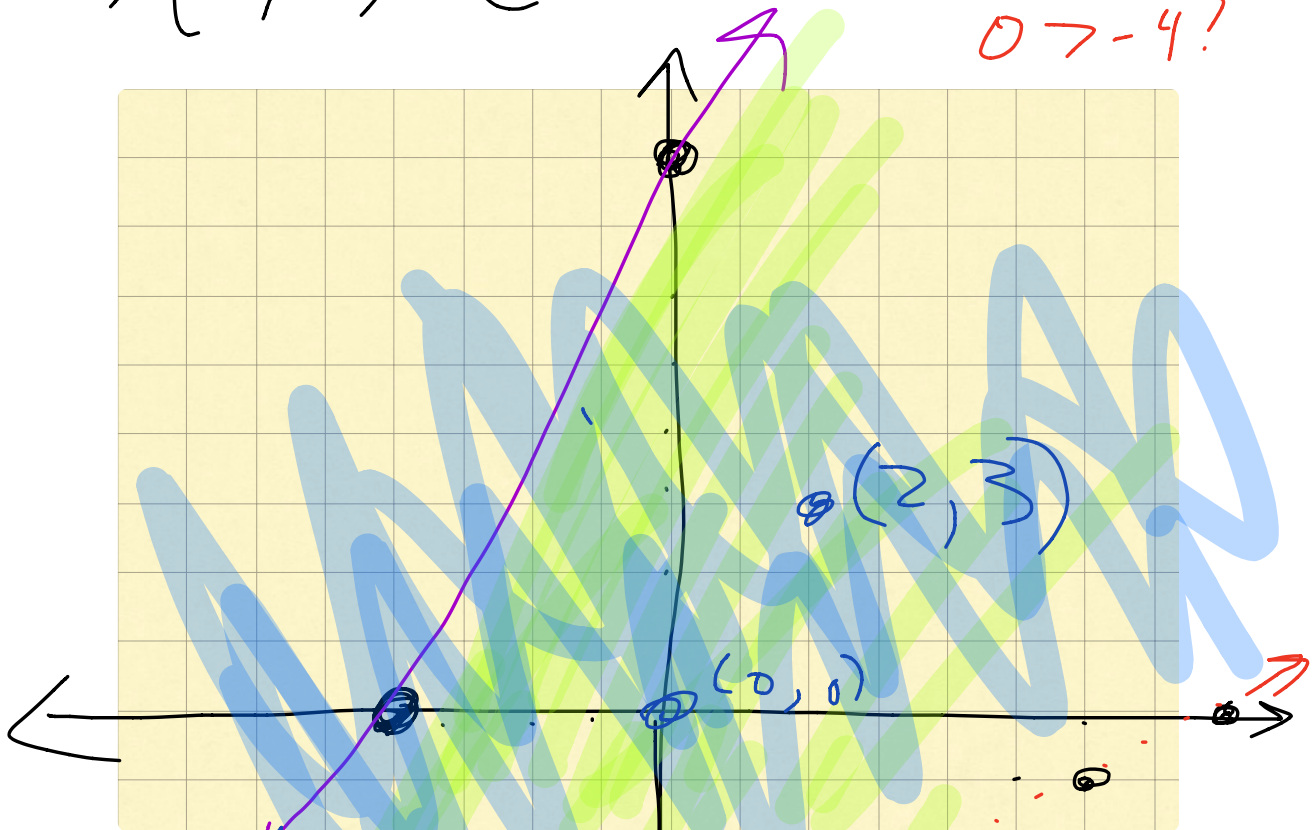
$$y - 2x \leq 8$$

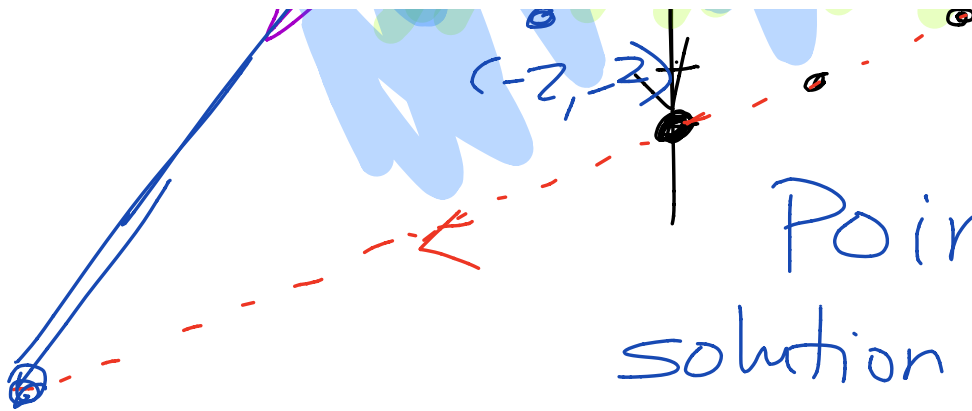
$$y > \frac{1}{2}x - 4$$

Use
Graph
Paper +
Straightedge!

$(0, 8)$ $(-4, 0)$

$0 > \frac{1}{2} \cdot 0 - 4?$
 $0 > -4?$





Points in
solution region

$$(0, 0), (2, 3)$$

$$(-2, -2)$$

Use algebra (analytical) solution

$$y - 2x = 8$$

$$y = \frac{1}{2}x - 4$$

Subst. bc y is isolated

$$\frac{1}{2}x - 4 - 2x = 8$$

$$-\frac{3}{2}x - 4 = 8$$

$$-\frac{3}{2}x = 12$$

$$x = -8$$

$$y = \frac{1}{2}(-8) - 4$$

$$y = -8$$

$$(-8, -8)$$

① 52 dolls

blue eyes

green eyes

16 more blue
than green

Let $b = \#$ of dolls w/ blue eyes.

Let $g = \#$ of dolls w/ green eyes

$$\begin{cases} b + g = 52 \\ b = g + 16 \end{cases}$$

$$g + 16 + g = 52$$

$$2g = 36$$

$$g = 18$$

$$b = 16 + 18 = 34$$

34 blue-eyed dolls & 18 green-eyed dolls

③ Eldora

15 boxes p.p. clips

7 pkgs index cards

\$55.40

Finn

12 boxes p.c.

10 pkgs. i.c.

\$61.70

Let

x = cost of one box of paper clips

y = cost of one pkg. of index cards

$$\begin{aligned} 55.40 &= 15x + 7y \\ 61.70 &= 12x + 10y \end{aligned}$$

$$554 = 150x + 70y$$

$$-431.9 = -84x - 70y$$

$$122.1 = 66x$$

$$\$1.85 = x$$

$$55.40 = 15(1.85) + 7y$$

$$55.40 = 27.75 + 7y$$

$$27.65 = 7y$$

$$y = \$3.95$$

paper clips : \$1.85/box
index cards: \$3.95/pkg.