

Homework Questions p.104 #13-18

$$13. 3x + 2y = 12$$

$$(0, \underline{6})$$

$$\begin{aligned} 2y &= 12 \\ \underline{2} & \\ y &= 6 \end{aligned}$$

$$(\underline{4}, 0)$$

$$\begin{aligned} y &= 0 \\ 3x &= 12 \\ \underline{3} & \\ x &= 4 \end{aligned}$$

$$(2, \underline{3})$$

$$\begin{aligned} 3 \cdot 2 + 2y &= 12 \\ 6 + 2y &= 12 \\ \underline{-6} & \quad \underline{-6} \\ 2y &= 6 \\ \underline{2} & \\ y &= 3 \end{aligned}$$

$$18. 3x + 5y = 3$$

$$(1, \underline{0})$$

$$\begin{aligned} 3 + 5y &= 3 \\ \underline{-3} & \quad \underline{-3} \\ 5y &= 0 \\ \underline{5} & \\ y &= 0 \end{aligned}$$

$$(-\underline{\frac{2}{3}}, \underline{1})$$

$$3(-\frac{2}{3}) + 5y = 3$$

$$\begin{aligned} -2 + 5y &= 3 \\ \underline{+2} & \quad \underline{+2} \end{aligned}$$

$$\begin{aligned} 5y &= 5 \\ \underline{5} & \\ y &= 1 \end{aligned}$$

$$y = 1$$

$$(\underline{\frac{1}{6}}, \underline{\frac{1}{2}})$$

$$3x + 5(\frac{1}{2}) = 3$$

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

$$\begin{aligned} 6x + 5 &= 6 \\ \underline{-5} & \end{aligned}$$

$$\begin{aligned} 6x &= 1 \\ \underline{6} & \end{aligned}$$

$$x = \frac{1}{6}$$

homework assessment
10.19.10

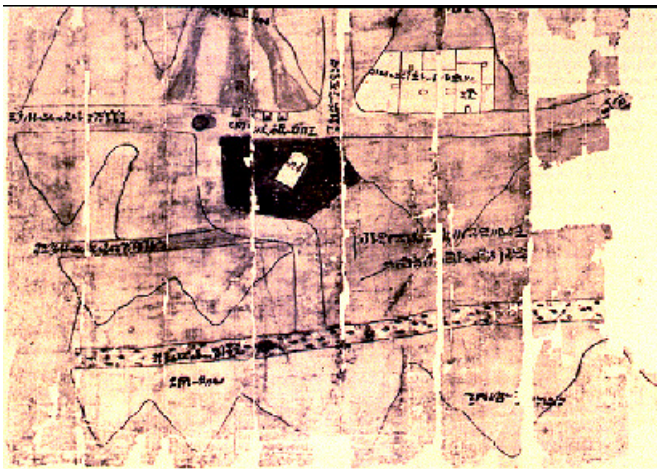
complete the ordered pairs

16. $x + 6y = -9$

$(0, \underline{\quad}), (\underline{\quad}, 0), (-3, \underline{\quad})$

History of Mathematics

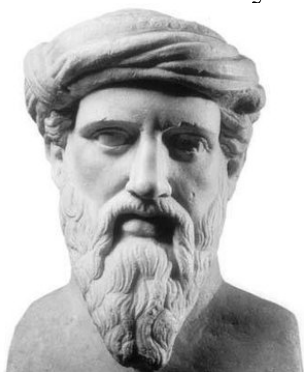
first math was used to count



very early Egyptians
developed geometry to
define land ownership

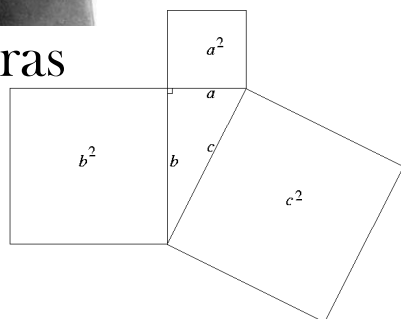
Two branches of mathematics

Geometry



pythagoras

c. 500 BC



Algebra



Muhammad ibn Mūsā al-Khwārizmī

c. 800 BC

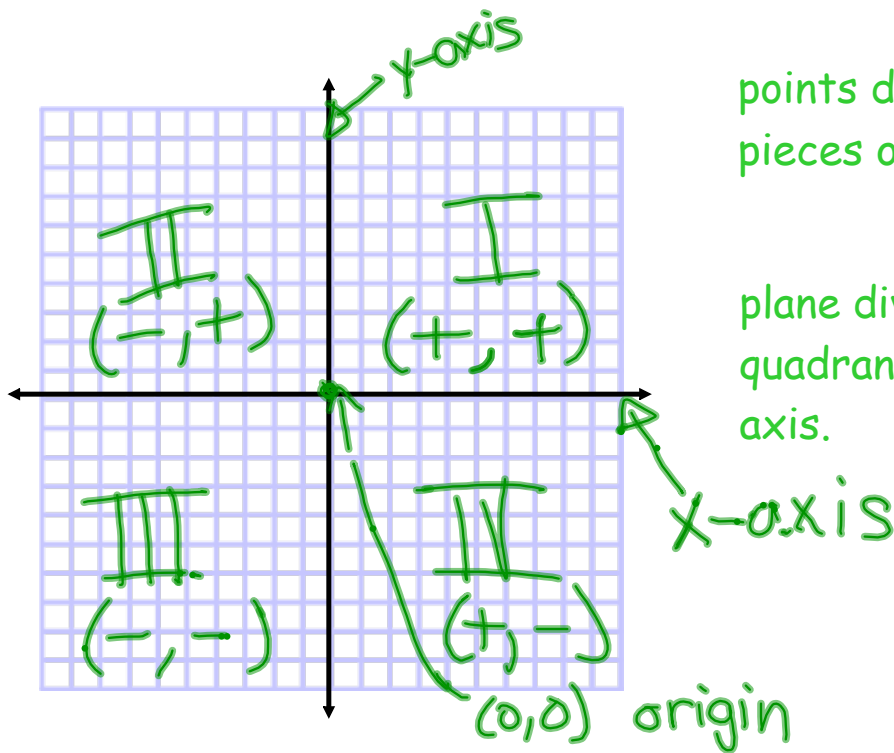
Algebra and Geometry are brought together by
Rene Descartes in the 1600's



radical idea that shapes are
made up of infinite number of
points, that these points can be
given positions, and the positions
of these points can be described
using algebra.

He created the Cartesian plane

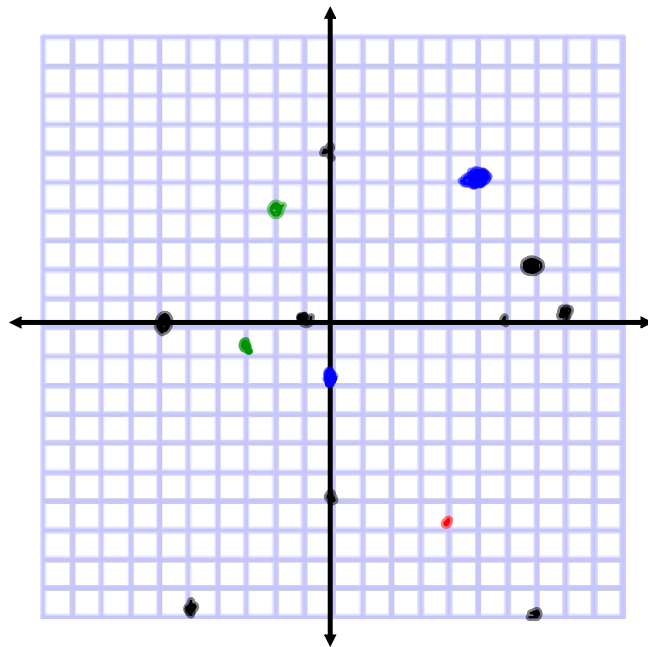
Cartesian Plane



points described by two pieces of info.

plane divided into 4 quadrants, by the two axis.

Let's Graph Points!



Homework:
p.110 #13-16, write the
coordinates of points A-E
p.111 #2