

Mr. Rob's Power Points

- Throughout the term, you'll be asked to go through power points that will guide you through different discovery activities.
- When you begin each power point, get out a piece of paper and put your name on the top so you'll be prepared to engage in the activities without interrupting yourself.
- So, get out a piece of paper and write your name on the top.
- Thank you!

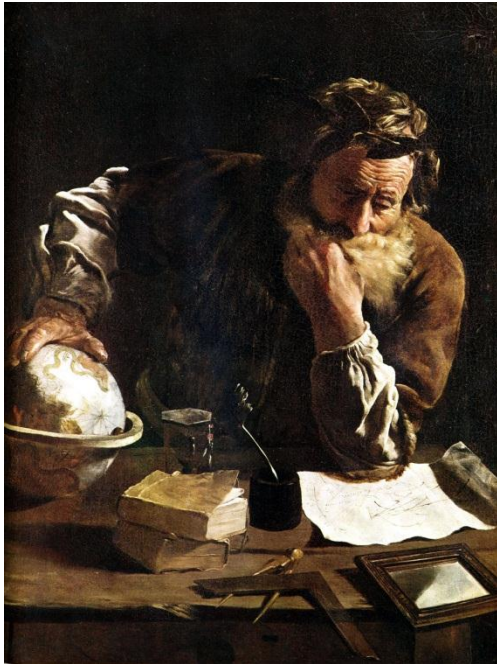
Who is René Descartes?

Take a moment to write down a paragraph about Mr. Descartes. It can be totally fictional if you don't know, but see if you can get as close as possible to what his real history might be.

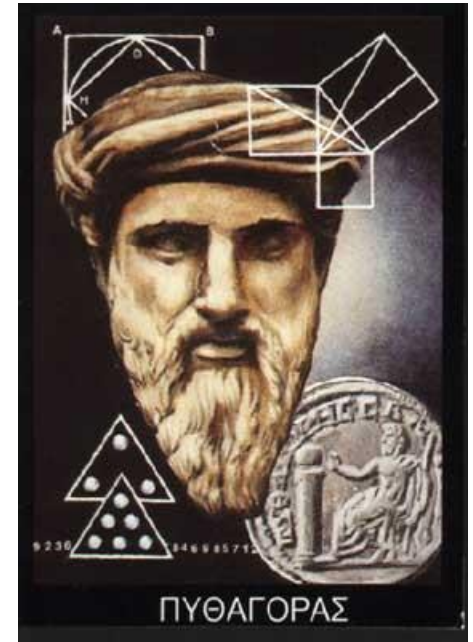
Really!

If you haven't written something, do so now. It may seem corny, but it doesn't matter if you're right or wrong. I just want to read your guesses. It's worth a few points, so you may as well. Mark it as number one on your paper. Get used to me asking you to write stuff you don't know. It helps you to get over the "Am I right?" Syndrome. You don't always have to be right. Just move forward and discover stuff!

The story of Descartes

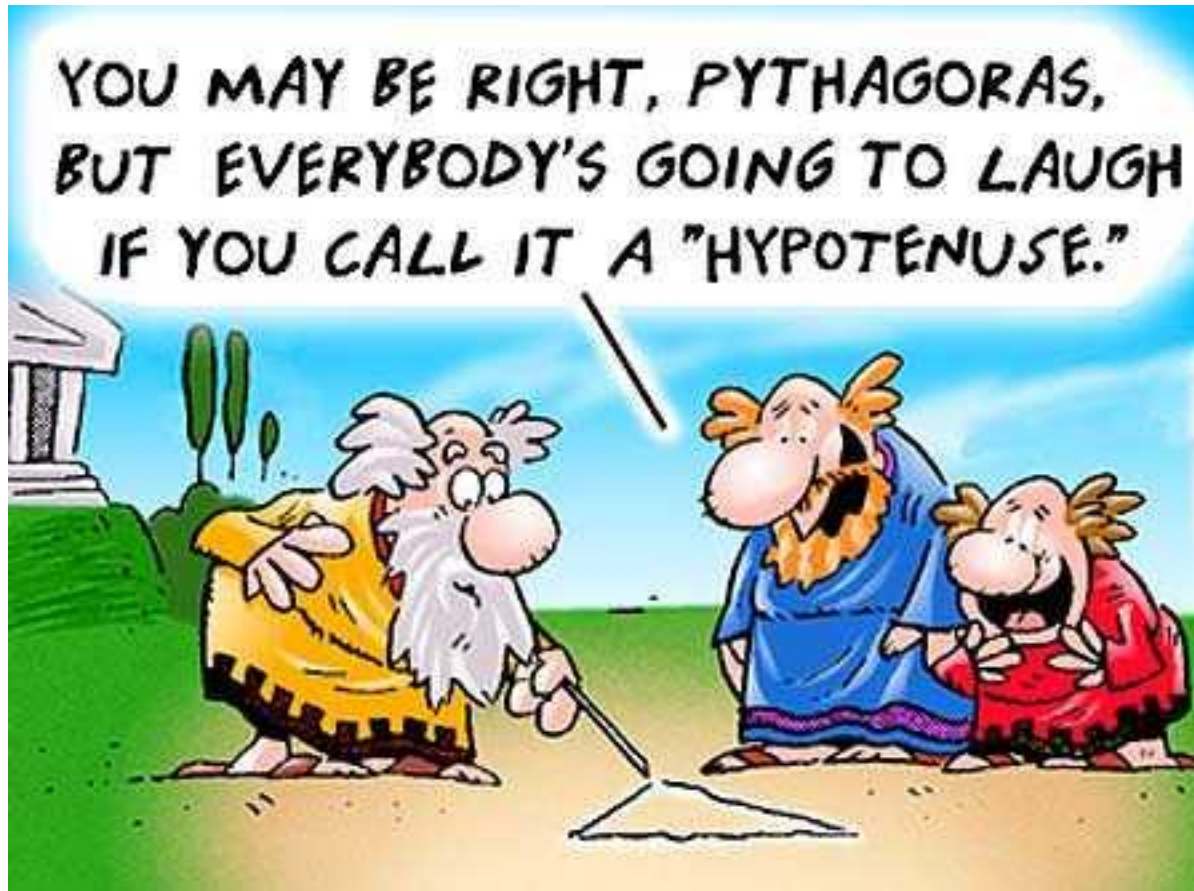


The two guys on either side of this paragraph are named Archimedes and Pythagorus. They loved geometric shapes and spent their lives thinking about them and discovering many of the principles of geometry we understand today. In fact, Legend has it that Archimedes was killed by an invading soldier because he yelled at the



soldier for messing up a circle he had drawn in the sand. These two men and many others like them developed what we formally call Geometry today.

Descartes, cont.



Descartes, Cont.

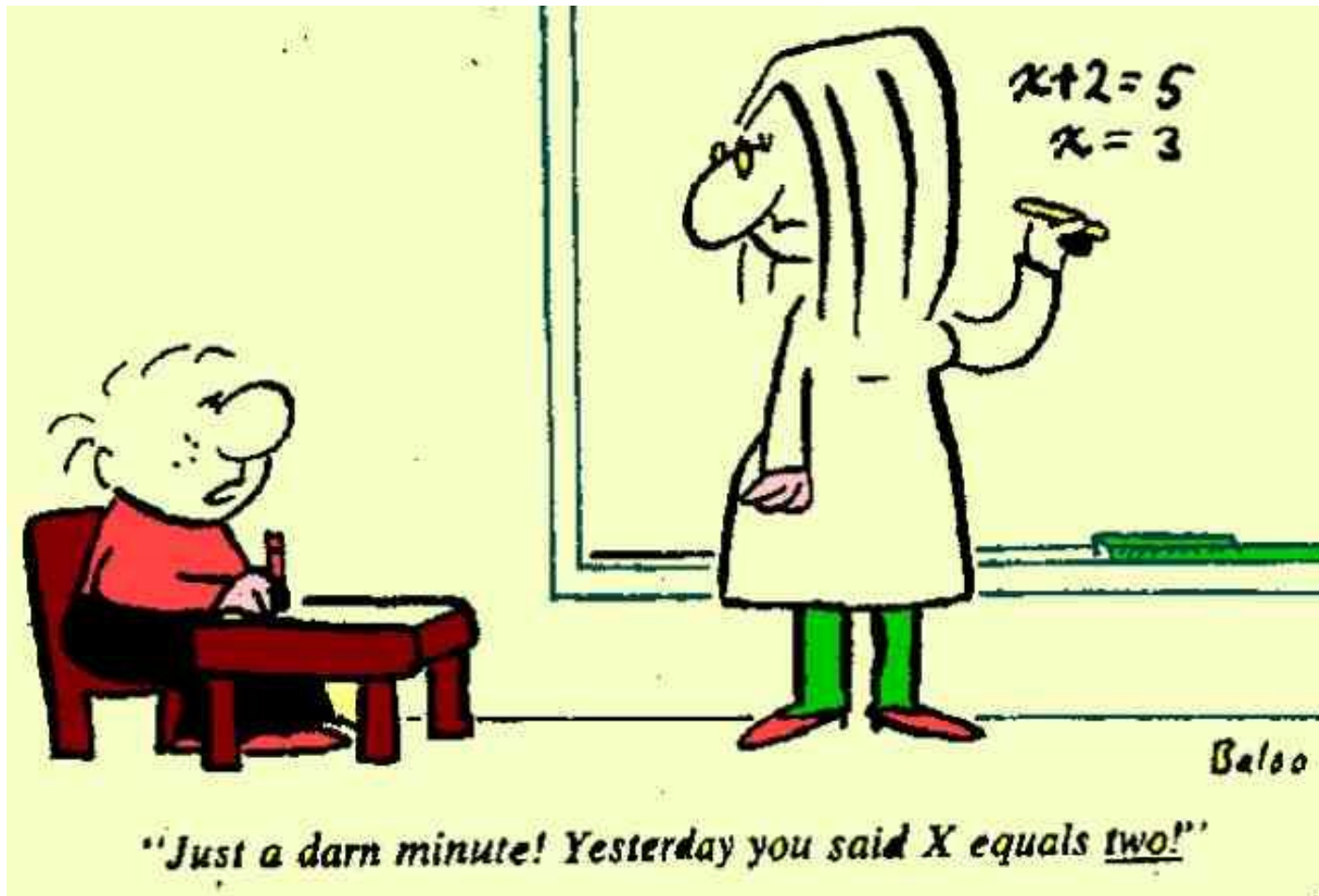


There were also a bunch of other guys who liked to play around with numbers and letters and stuff. They wrote books like the one on the left about how numbers associate with one another. The guy pictured on the right was a Persian mathematician named Muhammad ibn Mūsā al-khwārizmī.



He wrote a book about what he calls Al-Jabr, which means reunion in our language. This word sounds an awful lot like Algebra, doesn't it? That's where we got our word for what you are studying this term!

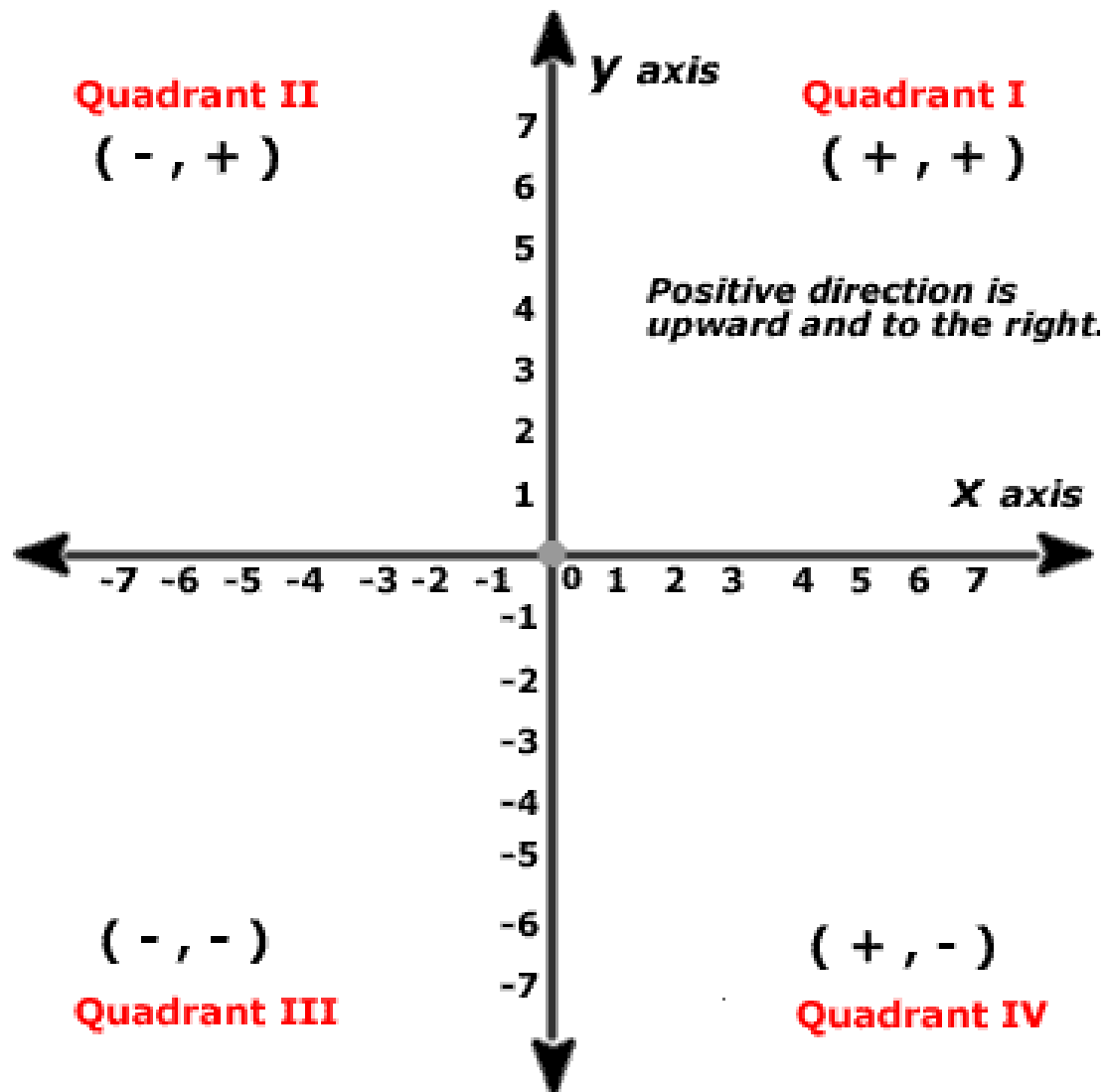
Descartes Cont.



Descartes Cont.

So, while the geometry guys played a little bit with letters and stuff, and the algebra guys played a little bit with shapes and pictures, they didn't really spend a lot of time in each other's territories.

Until, One day, there was a guy that came along and recognized a way to put them together!



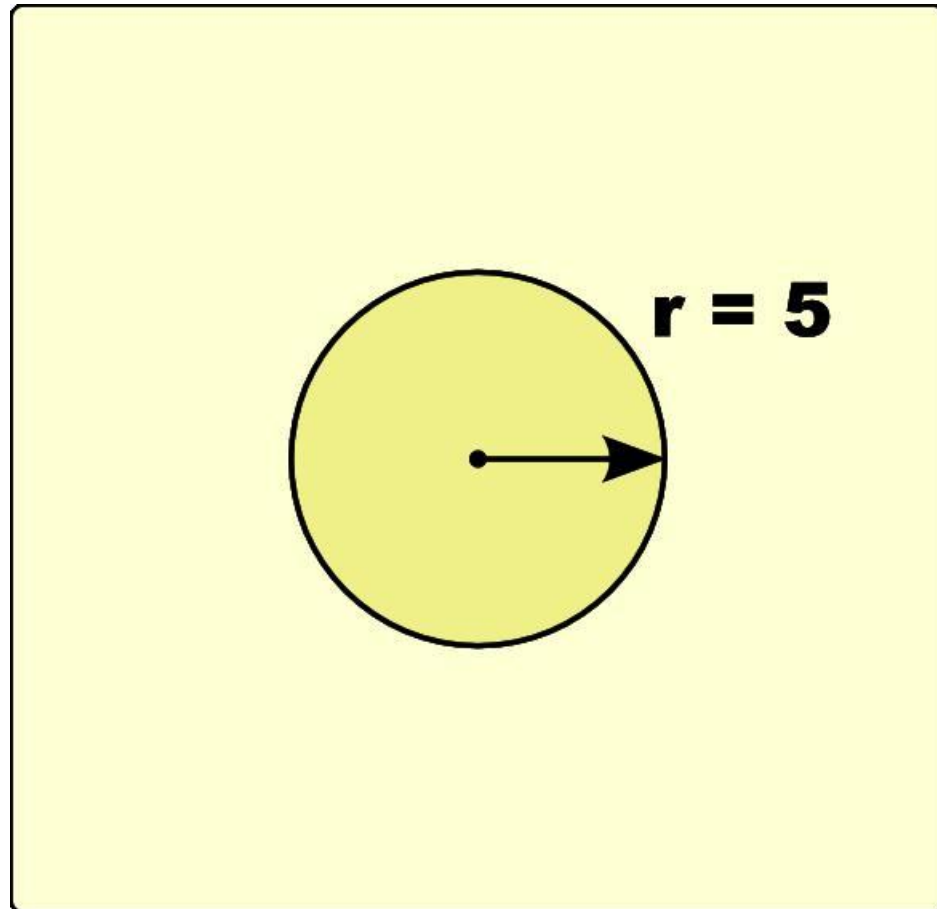
His name was Rene Descartes, and his contribution to mathematics was called the “Cartesian” plane, named after him.

Now, the geometry people have found a way to communicate to others the shapes they are talking about without drawing them out every time, and the Algebra people can now draw pictures of the letters and numbers they are playing with!

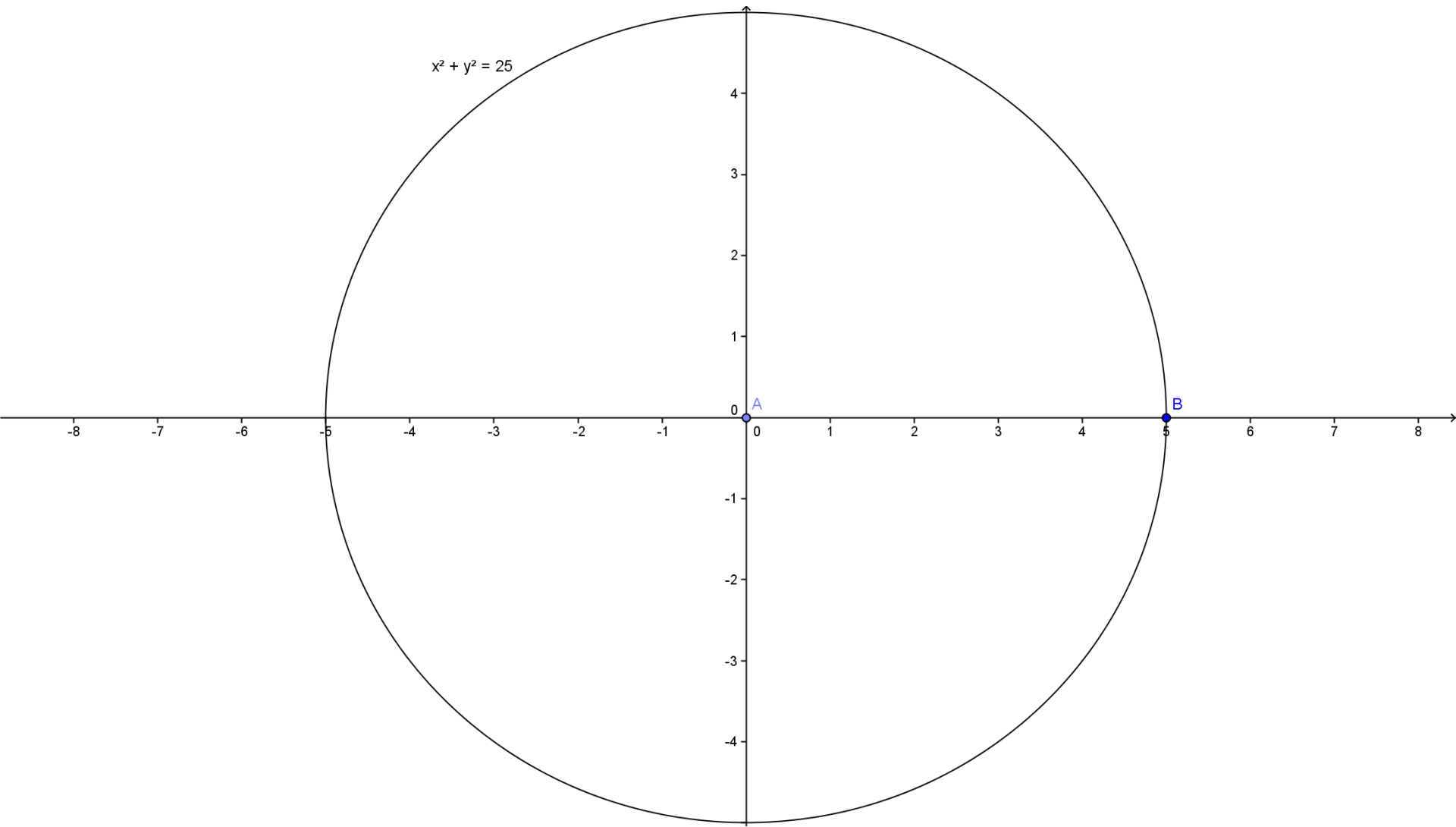
For Example, A person who like circles can say to an algebra guy, “Check out this awesome circle!” and the algebra guy will think of something like this:

$$x^2 + y^2 = 25$$

The algebra guy is thinking, “That’s an awesome circle” and the Geometry guy is thinking “Yup, you’re right”, but what he sees in his head is actually ...



Now, thanks to Descartes, they are both thinking the same thing!



Back to your assignment...

Now, go back to your paper and write a paragraph with at least 7 sentences that tell me about Descartes.

Click the link below
to go on to the next
lesson.

