

Risp 15: Circles Or Not?

Type $x^2 + y^2 + ax + by + c = 0$ into your graphing package.

Your package will make $a = b = c = 1$ by default.

What do you see – anything?

Now increase a - *a circle appears!*

For what value of a does the circle appear?

Now type in all the equations you can get
by mixing up a , b and c .

$x^2 + y^2 + ax + cy + b = 0$, $x^2 + y^2 + bx + ay + c = 0...$

How many equations do you have?

Now try varying the values of a , b and c .

How many circles can you get?

What decides how many circles you get?

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