The following two ways of visualizing $x^2$ will be useful for Integral Calculus.
Compare the yellow area and the green area.
Compare the yellow area and the green area.
Compare the yellow area and the green area.
Compare the yellow area and the green area.
How long is the green line-segment?
Two ways of visualizing $x^2$:

the yellow area

and

the green line-segment.
A similar picture will appear again, soon!
$y = x^2$

$0 \leq x \leq 1$
$y = x^2$

$0 \leq x \leq 1$
Now we are ready for

Integral Calculus