

# M242 - Calculus I

## §1.5 - Limits

### Intuitive definition.

#### Examples.

$$f(x) = x$$

$$g(x) = \frac{x^2 - x}{x - 1}$$

hole at  $x=1$

$$h(x) = |x|$$

$$p(x) = \frac{|x|}{x}$$

jump at  $x=0$

$$t(x) = \tan(x)$$

vertical asymptotes

e.g., at  $x = \frac{\pi}{2}$