5.5: Horizontal Asymptotes

* look at the highest exponent in the numerator & denominator (degree)
  - ↳ Top Heavy → no HA
  - ↳ Bottom Heavy → $y=0$
  - ↳ Equally weighted → look at face: $y=\frac{\#}{\#}$

- Ex 1) $f(x)=\frac{3x^{2}-6x+2}{9x^{2}-4x}$ Equally weighted

$y=\frac{3}{9}$ HA: $y=\frac{1}{3}$

- Ex 2) $f(x)=\frac{7}{x^{1}-3}$ Bottom Heavy

HA: $y=0$

- Ex 3) $f(x)=\frac{8x^{4}+2x^{2}}{4x^{3}}$ Top Heavy

no HA