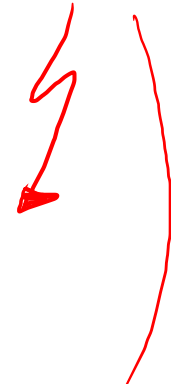


# Rationaliser le dénominateur

exemples : a)  $\frac{2}{\sqrt{7}} = \frac{2}{\sqrt{7}} \cdot \underbrace{\frac{\sqrt{7}}{\sqrt{7}}}_{=1} = \frac{2\sqrt{7}}{7}$

b)  $\sqrt{\frac{5}{3}} = \frac{\sqrt{5}}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{15}}{3}$

c)  $\frac{1}{\sqrt{5}-\sqrt{3}} = \left( \frac{1}{\sqrt{5}-\sqrt{3}} \cdot \frac{\sqrt{5}+\sqrt{3}}{\sqrt{5}+\sqrt{3}} \right) = \frac{\sqrt{5}+\sqrt{3}}{\underbrace{(\sqrt{5}-\sqrt{3})^2}_{5-2\sqrt{15}+3}}$  

$$\frac{1}{\sqrt{5}-\sqrt{3}} \cdot \frac{\sqrt{5}+\sqrt{3}}{\sqrt{5}+\sqrt{3}} = \frac{\sqrt{5}+\sqrt{3}}{5-3} = \frac{\sqrt{5}+\sqrt{3}}{2}$$

$\swarrow$   
 $\sqrt{5}+\sqrt{3}$  est le conjugué de  $\sqrt{5}-\sqrt{3}$

on utilise le produit rem.  $(a+b)(a-b) = a^2 - b^2$

d)  $\frac{\sqrt{3}}{\sqrt{6}+\sqrt{3}} = \frac{\sqrt{3}}{\sqrt{6}+\sqrt{3}} \cdot \frac{\sqrt{6}-\sqrt{3}}{\sqrt{6}-\sqrt{3}} = \frac{\sqrt{18}-3}{6-3} = \frac{3\sqrt{2}-3}{3}$

$$= \frac{3(\sqrt{2}-1)}{3} = \underline{\underline{\sqrt{2}-1}}$$