

LDDR - Niveau 1 : TE 9 - Calcul algébrique

Exercice 1 :

$$\text{a) } \frac{2}{5} - \left(\frac{7}{10}\right)^2 : \frac{35}{4} =$$

$$\text{b) } \left(x - \frac{3}{5}\right) - 100x^2 =$$

$$\text{for } x = -\frac{2}{5}$$

$$\text{c) } \frac{3 + \frac{2}{a}}{-1 + \frac{1}{a}} =$$

$$\text{d) } \frac{3}{2} - \frac{1+a}{4} =$$

$$\text{e) } \sqrt[3]{8} \cdot \sqrt{64}$$

Exercice 2 :

$$\text{a) } \frac{6}{\sqrt{3}} =$$

$$\text{b) } \frac{1 + \sqrt{3}}{3 - \sqrt{3}} =$$

$$\text{c) } \sqrt{18} - \sqrt{50}$$

Exercice 3 :

$$\text{a) } \frac{1}{\sqrt[4]{c^5}} =$$

$$\text{b) } \sqrt{a} : \sqrt[3]{a} =$$

$$\text{c) } \frac{(a^2)^3}{a^{-4}} =$$

$$\text{d) } (e^2 f^{-4})^3 : (\sqrt[3]{e^{-6} f^2})^2 =$$

Exercice 4 :

$$1. \text{ a) } x^2 + 14x + _ = (_ + _)^2$$

$$\text{b) } _ - 48x + 64 = (_ - _)^2$$

$$2. \text{ a) } x^3 - 4x = 0$$

$$\text{b) } (x+7)(2x-3) = 0$$

$$3. (2x+1)x^2 - 25(1+2x) = 0$$