Feuille d'exercice 17

Exercice 1

Vrai ou faux

① $\exp(6) = \exp(2) + \exp(3)$

② $\exp(7) = 7\exp(1)$

③ $\exp(-3) = -\exp(3)$

④ $\exp(-12) = \dfrac{1}{\left(\exp(6)\right)^2}$

⑤ $\exp(-12) = \dfrac{1}{2\exp(6)}$

⑥ $\exp(3x) \times \exp(-6x+1) = \dfrac{\exp(1)}{(\exp x)^3}$

⑦ $\left(\exp(x)\right)^2 \times \exp(-2x+1) = e$

⑧ $\exp(3) \times \exp(2) = \exp(5)$

⑨ $\dfrac{\exp(2x+5)}{\exp(-3x+1)} = \exp(5x+5)$

⑩ $\dfrac{1-\exp(2x)}{1+\exp(2x)} = 1 - \exp(x)$

Exercice 2   simplifier ou développer

① $e^x(e^x+5)$; ② $(e^x-1)(e^{-x}+3)$; ③ $(e^x-2)^2$