

Corrigé exercice 27 :

1. $e^{2x+1} = 3 \Leftrightarrow 2x + 1 = \ln(3) \Leftrightarrow x = \frac{1}{2}(\ln(3) - 1) = \ln\left(\sqrt{\frac{3}{e}}\right)$

2. $e^{-4x+2} - 5 = 0 \Leftrightarrow -4x + 2 = \ln(5) \Leftrightarrow x = \frac{-1}{4}(\ln(5) - 2)$

3. $\frac{1}{e^{x-7}} = \sqrt{2} \Leftrightarrow e^{7-x} = \sqrt{2} \Leftrightarrow 7 - x = \ln(\sqrt{2}) \Leftrightarrow x = 7 - \frac{1}{2}\ln(2)$

Corrigé exercice 28 :

1. $\frac{e^{3x+4}}{e^{x-7}} = 4 \Leftrightarrow e^{3x+4-x+7} = 4 \Leftrightarrow 2x + 11 = \ln(4) \Leftrightarrow x = \frac{\ln(4) - 11}{2}$

2. $e^{x^2-4} = 10 \Leftrightarrow x^2 - 4 = \ln(10) \Leftrightarrow x = \sqrt{4 + \ln(10)}$ ou $x = -\sqrt{4 + \ln(10)}$.

3. $\exp\left(\frac{3x+2}{-x+5}\right) = 10 \Leftrightarrow \frac{3x+2}{-x+5} = \ln(10) \Leftrightarrow 3x+2 = -\ln(10)x + 5\ln(10) \Leftrightarrow x = \frac{2 - 5\ln(10)}{-3 - \ln(10)}$