• Calculer les limites suivantes :

$$1. \lim_{x \to +\infty} (e^x - 1)$$

2. 
$$\lim_{x \to +\infty} \left( \frac{e^x - 1}{e^{2x} + 2} \right)$$
 8.  $\lim_{x \to +\infty} \frac{e^{2x} + 1}{e^x - 3}$ 

$$3. \lim_{x \to +\infty} (e^x - 1)$$

$$4. \lim_{x \to +\infty} (e^{2x} - e^x)$$

5. 
$$\lim_{x \to 0} \frac{e^x - 1}{1 - \cos x}$$

6. 
$$\lim_{x \to 0} e^x - x \ln|x|$$

7. 
$$\lim_{x\to 0} e^x - x \ln |x|$$

8. 
$$\lim_{x \to +\infty} \frac{e^{2x} + 1}{e^x - 3}$$

9. 
$$\lim_{x \to +\infty} \frac{e^{2x} + 5}{e^x - 2}$$

10. 
$$\lim_{x \to 0} \frac{xe^{-1/x}}{2x}$$

11. 
$$\lim_{x \to +\infty} \frac{e^{3x} - 1}{2x}$$

7. 
$$\lim_{x \to 0} e^x - x \ln|x|$$
 | 12.  $\lim_{x \to +\infty} \ln(1 + e^x)$ 

13. 
$$\lim_{x \to +\infty} \ln(\exp x - 1) - x$$

15. 
$$\lim_{x \to 0} \frac{e^{3x} - e^x}{x}$$