

**Exercice 1** ( Limite de  $f(x)$  quand  $x$  tend vers  $+\infty$  ) :

Compléter :

$$\lim_{x \rightarrow +\infty} -\frac{1}{x} = \dots\dots$$

$$\lim_{x \rightarrow +\infty} 2 + \frac{1}{x} = \dots\dots$$

$$\lim_{x \rightarrow +\infty} \frac{1}{x^2} = \dots\dots$$

$$\lim_{x \rightarrow +\infty} -\frac{x^2}{2} = \dots\dots$$

$$\lim_{x \rightarrow +\infty} -\sqrt{x} = \dots\dots$$

$$\lim_{x \rightarrow +\infty} -5x^3 = \dots\dots$$

$$\lim_{x \rightarrow +\infty} -3x^2 = \dots\dots$$

$$\lim_{x \rightarrow +\infty} \frac{-2}{-5x^3} = \dots\dots$$

$$\lim_{x \rightarrow +\infty} -10x = \dots\dots$$

**Exercice 2** ( Limite de  $f(x)$  quand  $x$  tend vers  $-\infty$  ) :

Compléter :

$$\lim_{x \rightarrow -\infty} -\frac{1}{x} = \dots\dots$$

$$\lim_{x \rightarrow -\infty} 2 + \frac{1}{x} = \dots\dots$$

$$\lim_{x \rightarrow -\infty} \frac{1}{x^2} = \dots\dots$$

$$\lim_{x \rightarrow -\infty} -\frac{x^2}{2} = \dots\dots$$

$$\lim_{x \rightarrow -\infty} -\sqrt{-x} = \dots\dots$$

$$\lim_{x \rightarrow -\infty} -5x^3 = \dots\dots$$

$$\lim_{x \rightarrow -\infty} -3x^2 = \dots\dots$$

$$\lim_{x \rightarrow -\infty} \frac{-2}{-5x^3} = \dots\dots$$

$$\lim_{x \rightarrow -\infty} -10x = \dots\dots$$

**Exercice 3** ( Limite de  $f(x)$  quand  $x$  tend vers  $a$  ) :

En vous aidant d'un tableau de signe, compléter:

$$\lim_{\substack{x \rightarrow 0 \\ x < 0}} -\frac{1}{x} = \dots\dots$$

$$\lim_{\substack{x \rightarrow 2 \\ x < 2}} x - 2 = \dots\dots$$

$$\lim_{\substack{x \rightarrow 2 \\ x > 2}} x - 2 = \dots\dots$$

$$\lim_{\substack{x \rightarrow -3 \\ x < -3}} x + 3 = \dots\dots$$

$$\lim_{\substack{x \rightarrow -3 \\ x > -3}} x + 3 = \dots\dots$$

$$\lim_{\substack{x \rightarrow 6 \\ x < 6}} 6 - x = \dots\dots$$

$$\lim_{\substack{x \rightarrow 6 \\ x > 6}} 6 - x = \dots\dots$$

$$\lim_{\substack{x \rightarrow 3 \\ x < 3}} 2x - 6 = \dots\dots$$

$$\lim_{\substack{x \rightarrow 3 \\ x > 3}} 2x - 6 = \dots\dots$$

**Exercice 4** ( Limite de  $f(x)$  quand  $x$  tend vers  $a$  ) :

En vous aidant d'un tableau de signe, compléter:

$$\lim_{\substack{x \rightarrow 0 \\ x < 0}} -x^5 = \dots\dots$$

$$\lim_{\substack{x \rightarrow 2 \\ x < 2}} (2 - x)^2 = \dots\dots$$

$$\lim_{\substack{x \rightarrow 2 \\ x > 2}} -3(x - 2)^3 = \dots\dots$$

$$\lim_{\substack{x \rightarrow -3 \\ x < -3}} (x + 3)^4 = \dots\dots$$

$$\lim_{\substack{x \rightarrow -3 \\ x > -3}} (x + 3)^4 = \dots\dots$$

$$\lim_{\substack{x \rightarrow 6 \\ x < 6}} -5(6 - x) = \dots\dots$$

$$\lim_{\substack{x \rightarrow 6 \\ x > 6}} -(6 - x)^3 = \dots\dots$$

$$\lim_{\substack{x \rightarrow 3 \\ x < 3}} \frac{1}{2x - 6} = \dots\dots$$

$$\lim_{\substack{x \rightarrow 3 \\ x > 3}} \frac{1}{2x - 6} = \dots\dots$$

$$\lim_{\substack{x \rightarrow 2 \\ x > 2}} \frac{2}{2x - 4} = \dots\dots$$

$$\lim_{\substack{x \rightarrow 2 \\ x < 2}} \frac{2}{2x - 4} = \dots\dots$$

$$\lim_{\substack{x \rightarrow -5 \\ x > -5}} \frac{-31}{-5x + 5} = \dots\dots$$

$$\lim_{\substack{x \rightarrow -5 \\ x < -5}} \frac{-31}{x + 5} = \dots\dots$$

$$\lim_{\substack{x \rightarrow 3 \\ x < 3}} \frac{-7}{6 - 2x} = \dots\dots$$

$$\lim_{\substack{x \rightarrow 3 \\ x > 3}} \frac{-7}{6 - 2x} = \dots\dots$$