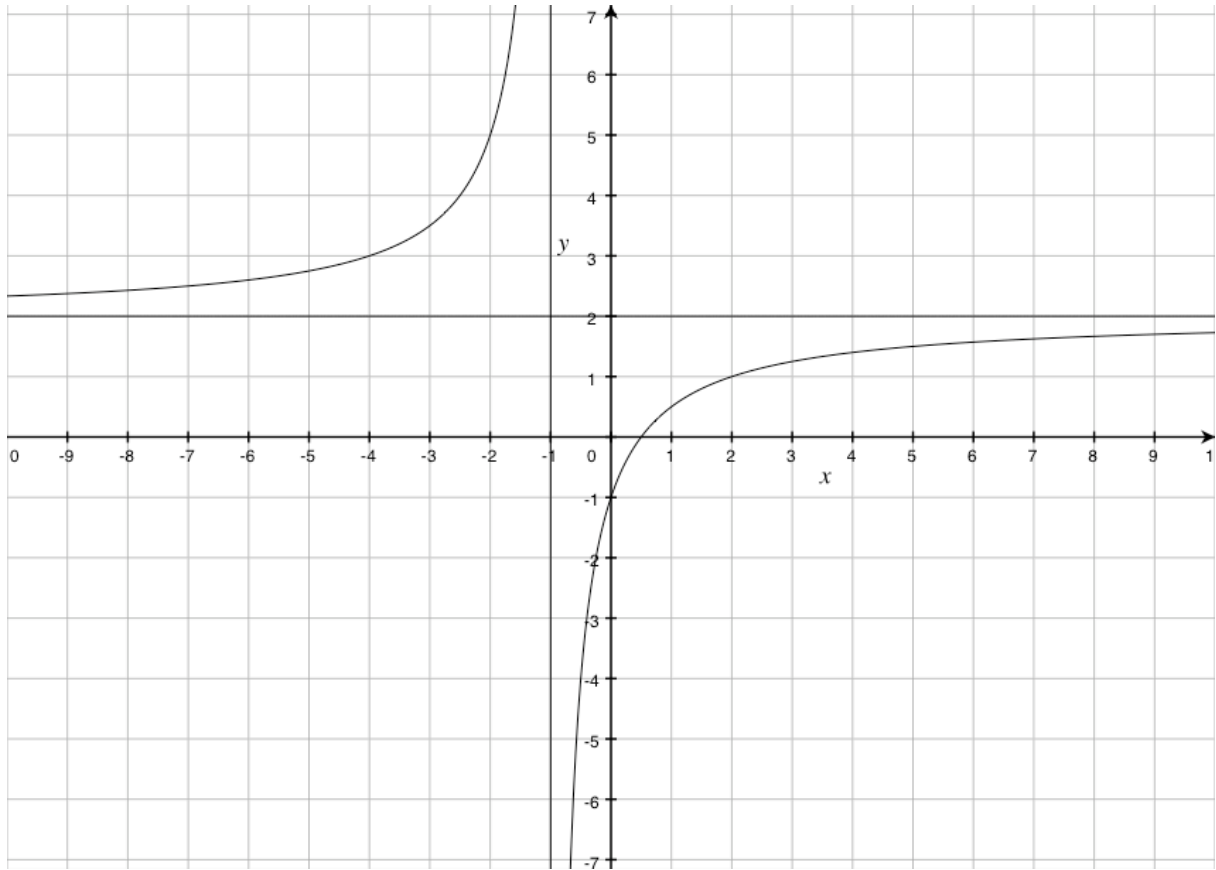
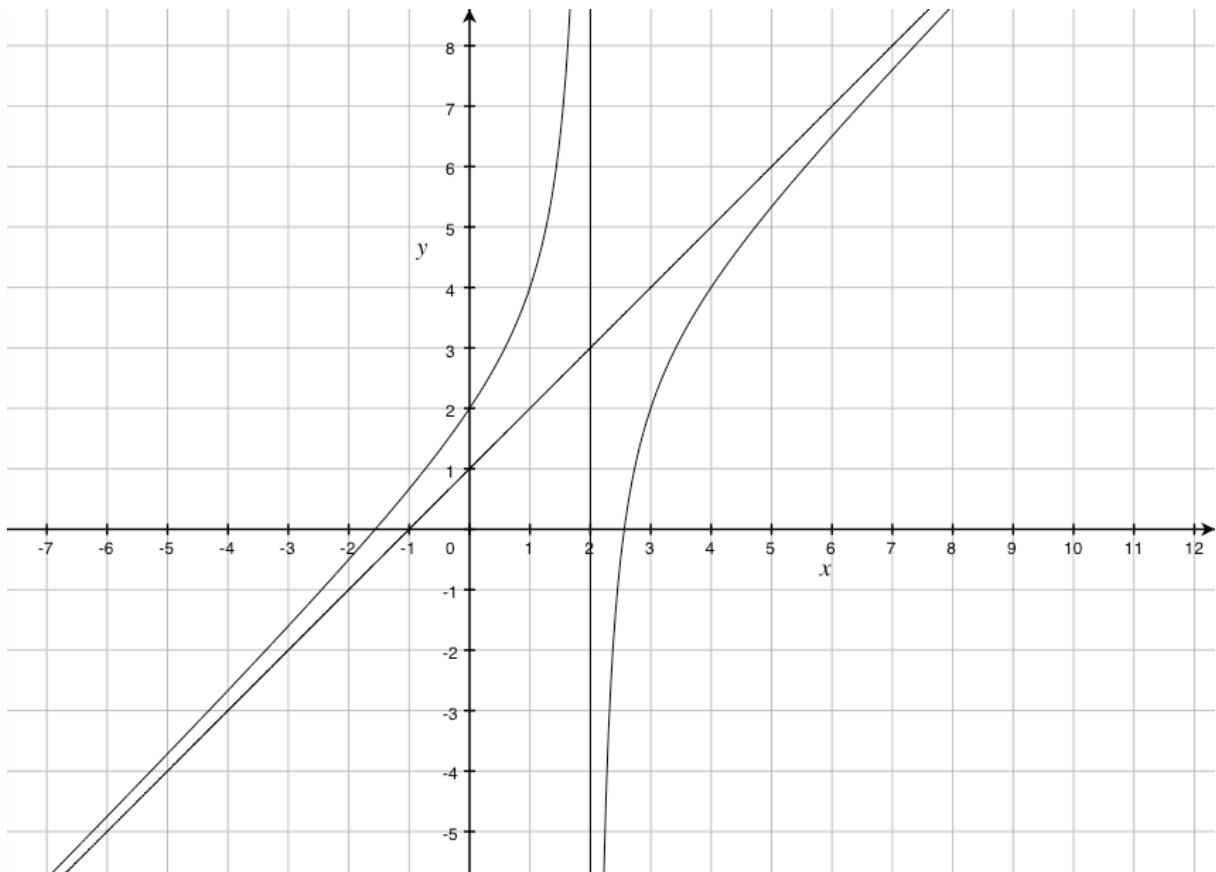


Préciser les limites et les asymptotes des fonctions suivantes

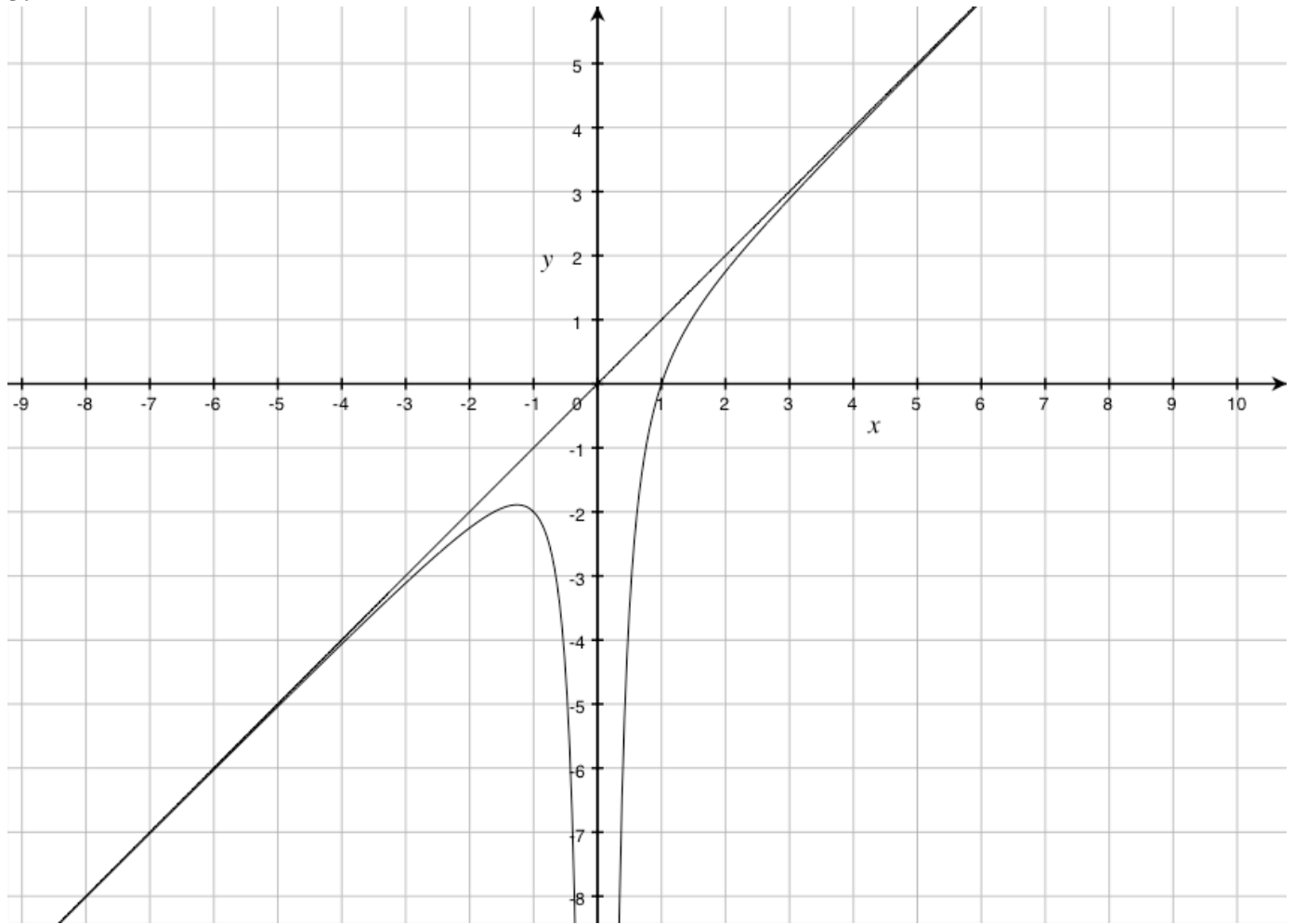
1.



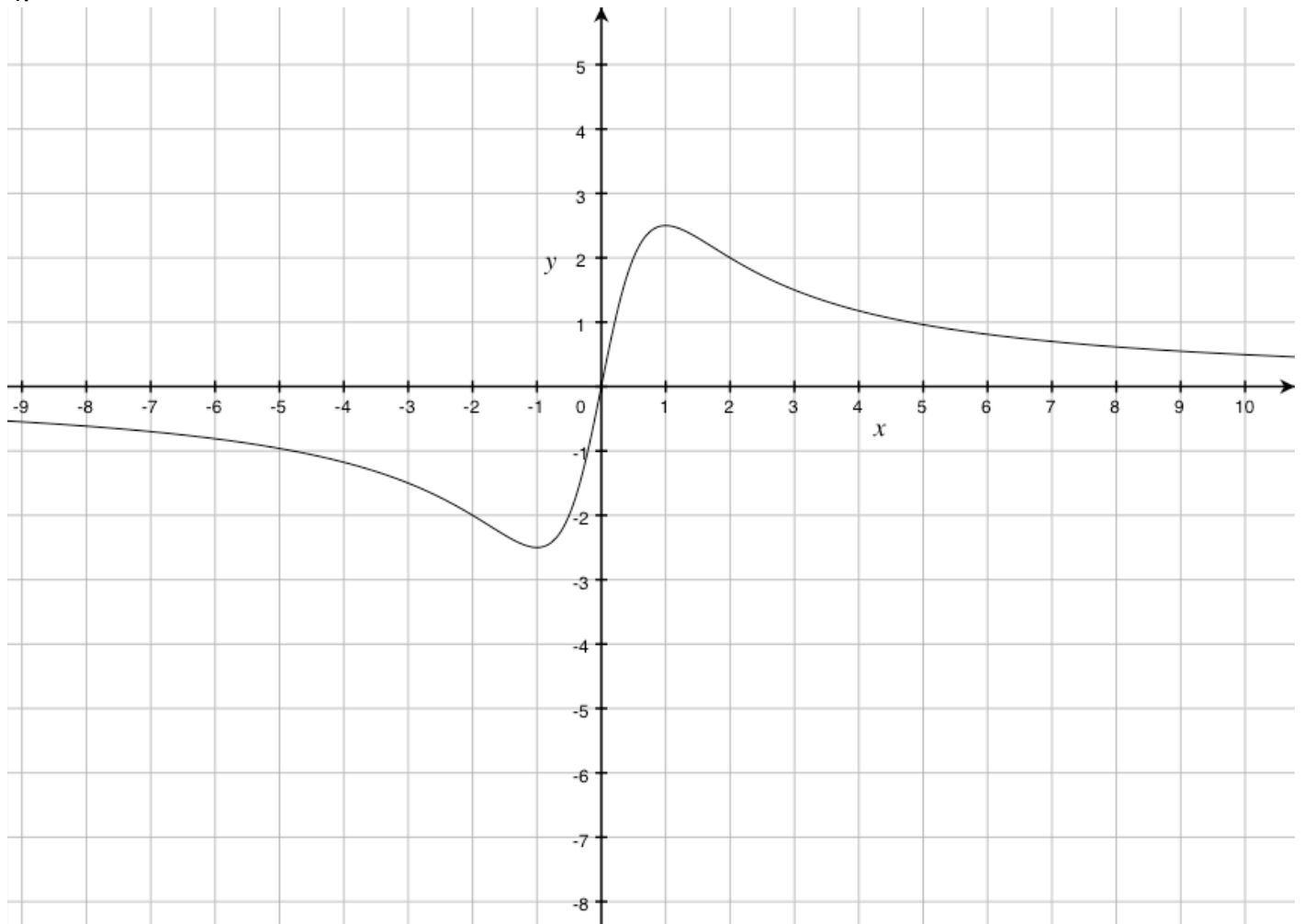
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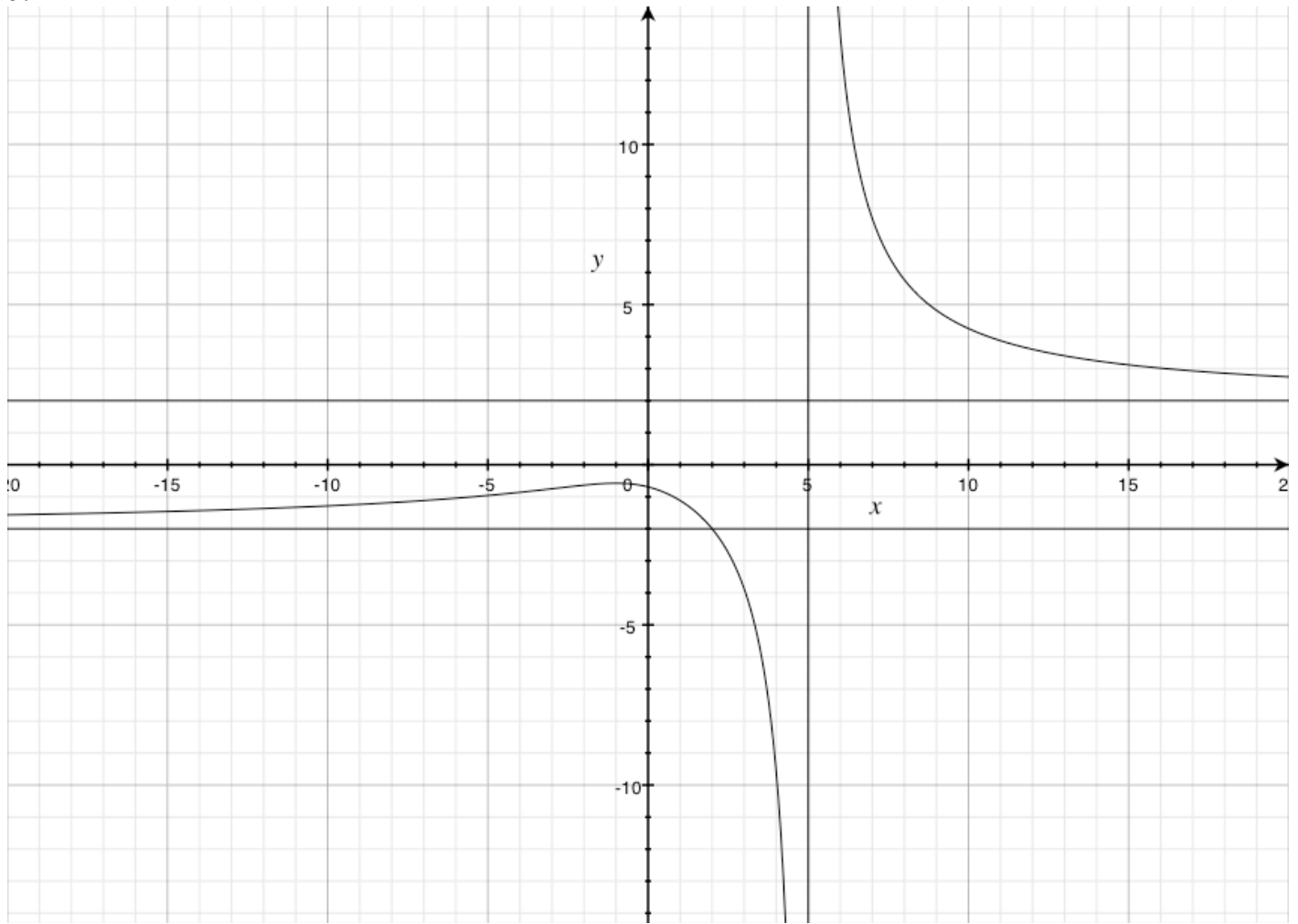
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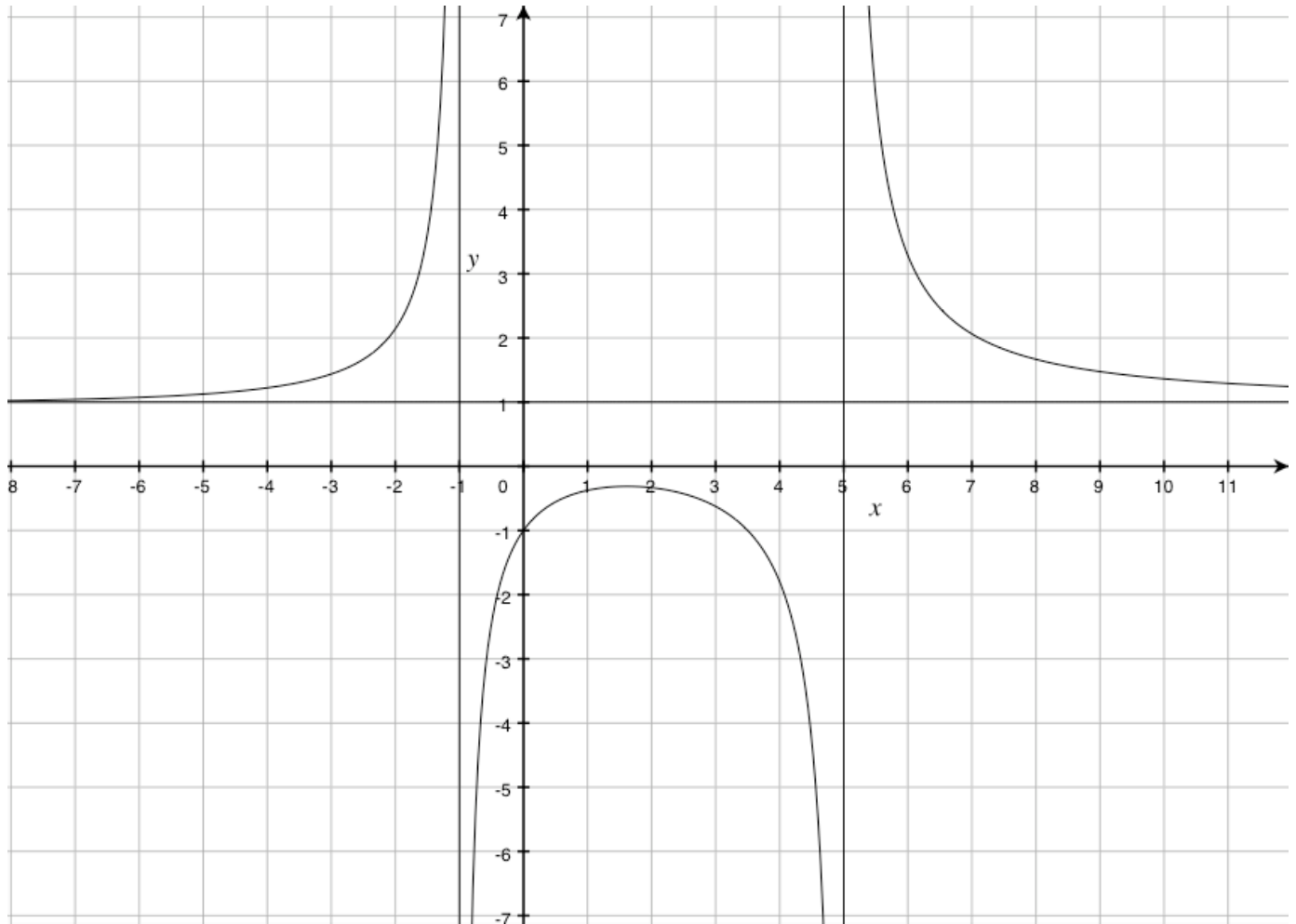
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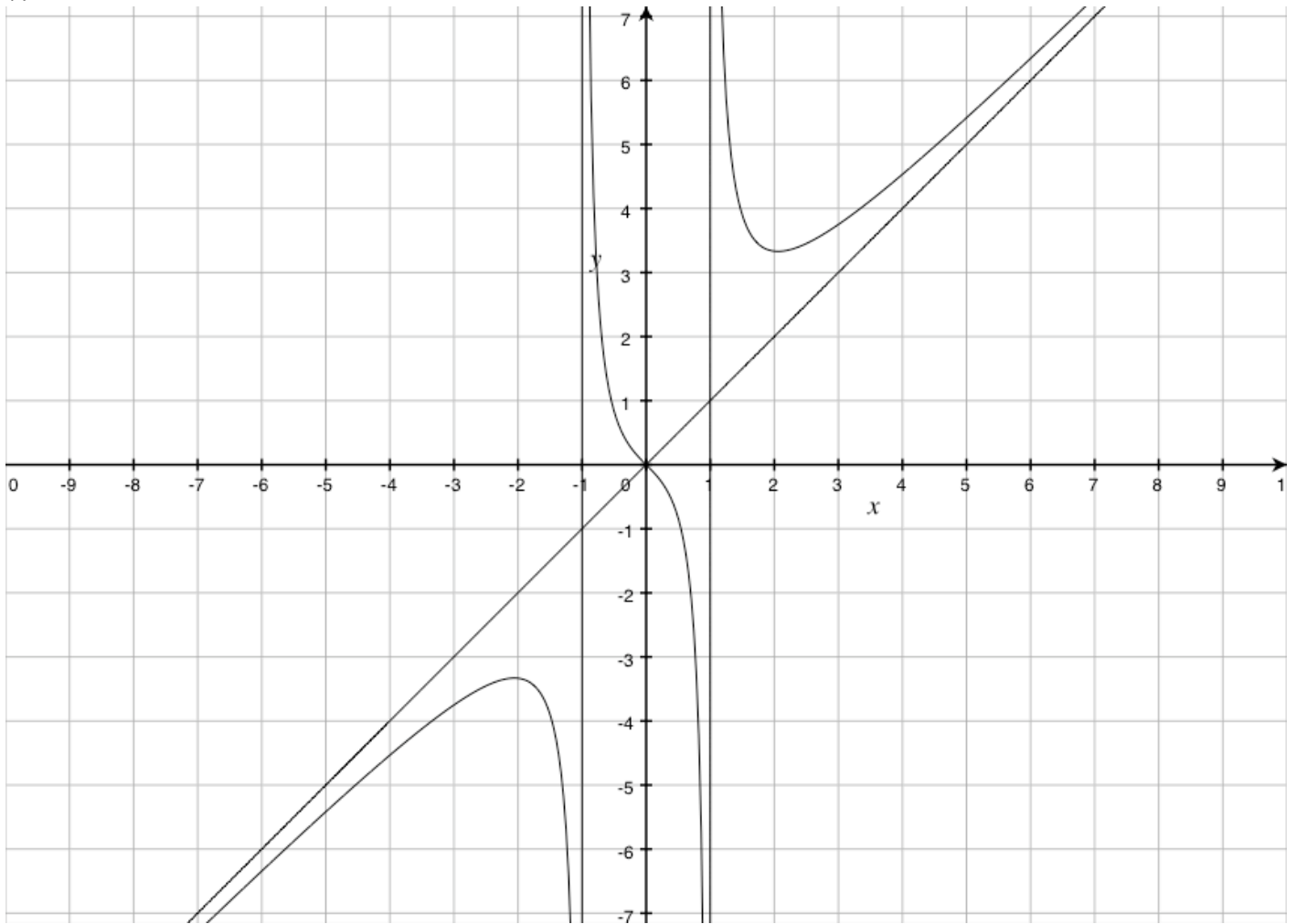
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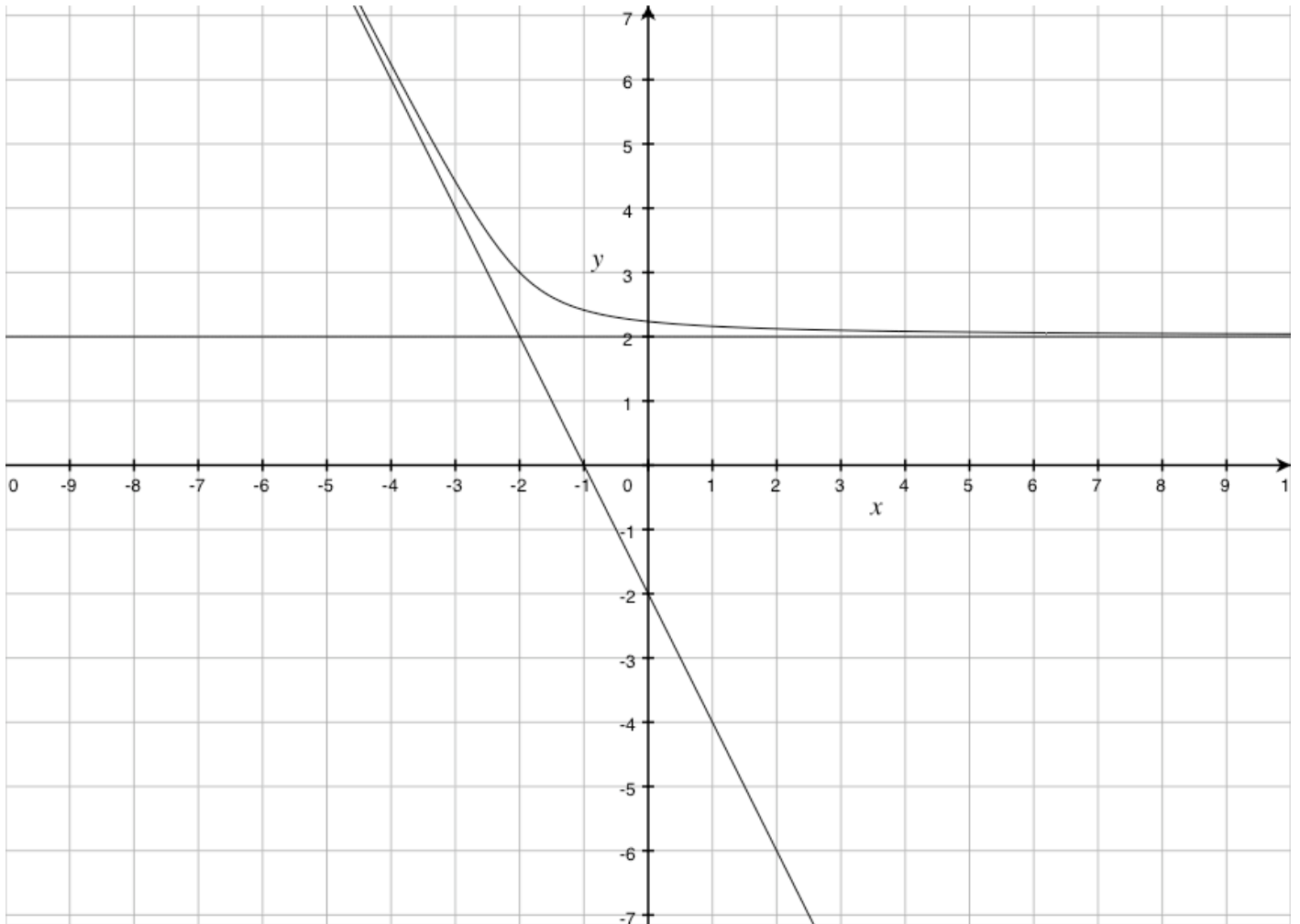
6.



7.



8.



Solutions :

<p>1)</p> $AV \equiv x = -1$ $\begin{cases} \lim_{x \rightarrow -1^+} f(x) = -\infty \\ \lim_{x \rightarrow -1^-} f(x) = +\infty \end{cases}$ $AH \equiv y = 2$ $\lim_{x \rightarrow \pm\infty} f(x) = 2$	<p>2)</p> $AV \equiv x = 2$ $\begin{cases} \lim_{x \rightarrow 2^+} f(x) = -\infty \\ \lim_{x \rightarrow 2^-} f(x) = +\infty \end{cases}$ $AO \equiv y = x + 1$ $\lim_{x \rightarrow +\infty} f(x) = +\infty$ $\lim_{x \rightarrow -\infty} f(x) = -\infty$
<p>3)</p> $AV \equiv x = 0$ $\lim_{x \rightarrow 0} f(x) = -\infty$ $AO \equiv y = x$ $\lim_{x \rightarrow +\infty} f(x) = +\infty$ $\lim_{x \rightarrow -\infty} f(x) = -\infty$	<p>4)</p> $AH \equiv y = 0$ $\lim_{x \rightarrow \pm\infty} f(x) = 0$
<p>5)</p> $AV \equiv x = 5$ $\begin{cases} \lim_{x \rightarrow 5^+} f(x) = +\infty \\ \lim_{x \rightarrow 5^-} f(x) = -\infty \end{cases}$ $AH \equiv y = 2 \text{ à droite}$ $\lim_{x \rightarrow +\infty} f(x) = 2$ $AH \equiv y = -2 \text{ à gauche}$ $\lim_{x \rightarrow -\infty} f(x) = -2$	<p>6)</p> $AV \equiv x = 5$ $\begin{cases} \lim_{x \rightarrow 5^+} f(x) = +\infty \\ \lim_{x \rightarrow 5^-} f(x) = -\infty \end{cases}$ $AV \equiv x = -1$ $\begin{cases} \lim_{x \rightarrow -1^+} f(x) = -\infty \\ \lim_{x \rightarrow -1^-} f(x) = +\infty \end{cases}$ $AH \equiv y = 1$ $\lim_{x \rightarrow \pm\infty} f(x) = 1$
<p>7)</p> $AV \equiv x = -1$ $\begin{cases} \lim_{x \rightarrow -1^+} f(x) = +\infty \\ \lim_{x \rightarrow -1^-} f(x) = -\infty \end{cases}$ $AV \equiv x = 1$ $\begin{cases} \lim_{x \rightarrow 1^+} f(x) = +\infty \\ \lim_{x \rightarrow 1^-} f(x) = -\infty \end{cases}$ $AO \equiv y = x$ $\lim_{x \rightarrow +\infty} f(x) = +\infty$ $\lim_{x \rightarrow -\infty} f(x) = -\infty$	<p>8)</p> $AH \equiv y = 2 \text{ à droite}$ $\lim_{x \rightarrow +\infty} f(x) = 2$ $AO \equiv y = -2x - 2 \text{ à gauche}$ $\lim_{x \rightarrow -\infty} f(x) = +\infty$