

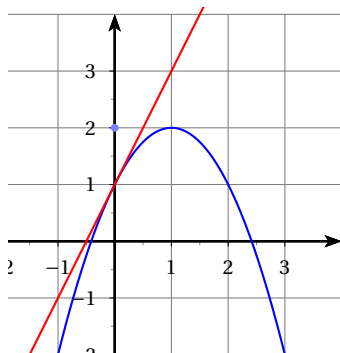
Activités mentales

Stéphane Mirbel

Vous disposez de **45 secondes** pour répondre aux questions

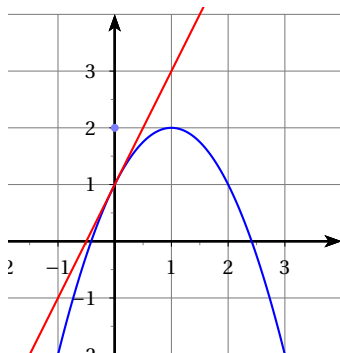


Question 1



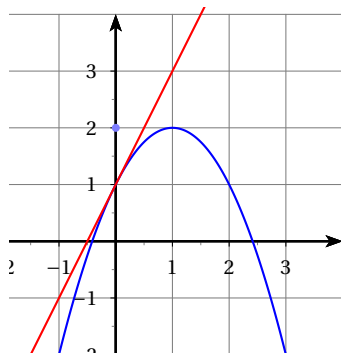
Lire $f'(0)$ et $f(0)$

Question 1



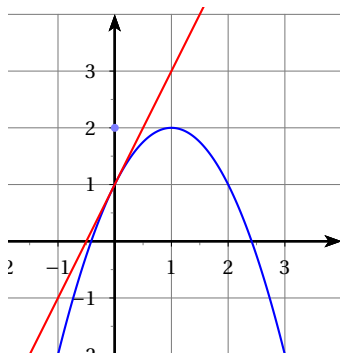
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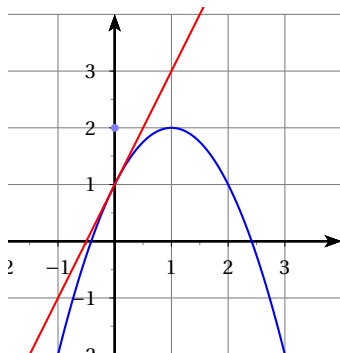
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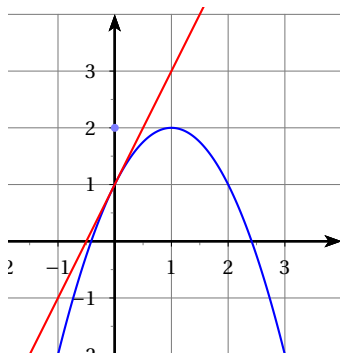
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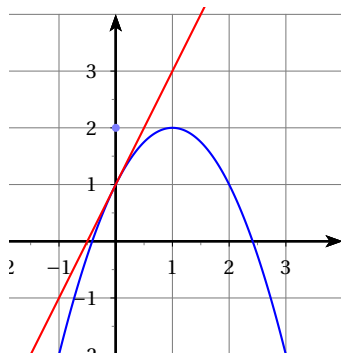
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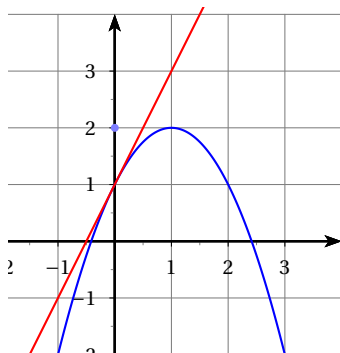
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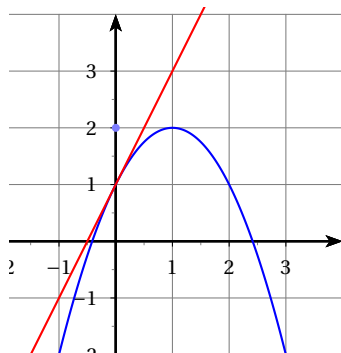
Lire $f'(0)$ et $f(0)$

👉 Question 1



Lire $f'(0)$ et $f(0)$

Question 1



Lire $f'(0)$ et $f(0)$

Question 2



$$f(x) = \frac{2x}{x+1}$$

Calculer $f'(x)$.

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Question 3



$$f(x) = 3x - 7 + \frac{1}{x}$$

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Calculer $f'(x)$.

Question 4



$$f(x) = -x^2 + 5x - 1$$

Résoudre $f'(x) > 0$

Question 4



$$f(x) = -x^2 + 5x - 1$$

Résoudre $f'(x) > 0$

Question 4



$$f(x) = -x^2 + 5x - 1$$

Résoudre $f'(x) > 0$

Question 4



$$f(x) = -x^2 + 5x - 1$$

Résoudre $f'(x) > 0$

Question 4



$$f(x) = -x^2 + 5x - 1$$

Résoudre $f'(x) > 0$

Question 4



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Résoudre $f'(x) > 0$

Question 4



$$f(x) = -x^2 + 5x - 1$$

Résoudre $f'(x) > 0$

Question 4



$$f(x) = -x^2 + 5x - 1$$

Résoudre $f'(x) > 0$

Question 4



$$f(x) = -x^2 + 5x - 1$$

Résoudre $f'(x) > 0$

Question 5



$f(x) = x^3 - x^2 + x - 1$
Quel est le signe de $f'(x)$?

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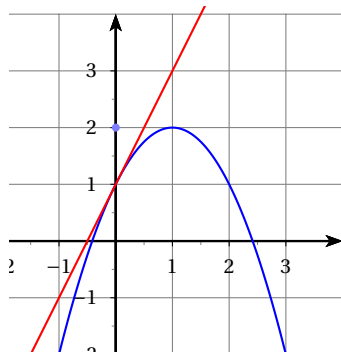


$f(x) = x^3 - x^2 + x - 1$
Quel est le signe de $f'(x)$?

Correction



👉 Correction question 1



$$f'(0) = 2 \text{ et } f(0) = 1$$

Correction question 2

$$f(x) = \frac{2x}{x+1}$$
$$f'(x) = \frac{2(x+1) - 2x}{(x+1)^2} = \frac{2}{(x+1)^2}.$$

Correction question 3

$$f(x) = 3x - 7 + \frac{1}{x}$$

Calculer $f'(x) = 3 - \frac{1}{x^2} = \frac{3x^2 - 1}{x^2}$.

Correction question 4

$$f(x) = -x^2 + 5x - 1$$

$$f'(x) = -2x + 5$$

$$f'(x) > 0 \iff -2x + 5 > 0 \iff x < \frac{5}{2} \iff x \in]-\infty ; 2,5[.$$

Correction question 5

$$f(x) = x^3 - x^2 + x - 1$$

$$f'(x) = 3x^2 - 2x + 1$$

$\Delta = 4 - 12 < 0$; $f'(x)$ est du signe de 3 soit strictement positif.



Fin