

$f(0) = ?$
 $f'(0) = ?$

Equation de la
 tangente en 0 ?

$$f(0) = \boxed{-1,5}$$

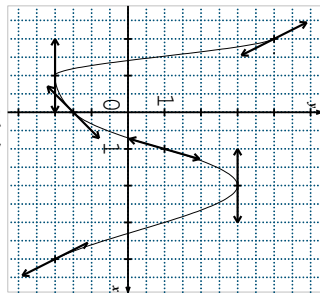
$$f'(0) = \boxed{1}$$

Tangente en 0 :

$$y = f'(0) \times (x - 0) + f(0)$$

$$= 1(x) - 1,5$$

$$= \boxed{x - 1,5}$$



$f(4) = ?$
 $f'(4) = ?$

Equation de la
 tangente en 4 ?

$$f(4) = \boxed{-2}$$

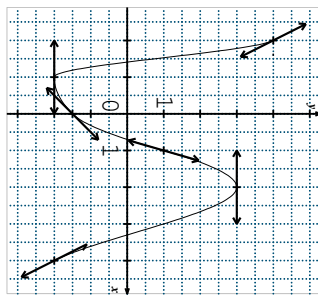
$$f'(4) = \boxed{-2}$$

Tangente en 4 :

$$y = f'(4) \times (x - 4) + f(4)$$

$$= -2(x - 4) - 2$$

$$= \boxed{-2x + 6}$$



$f(-1) = ?$
 $f'(-1) = ?$

Equation de la
 tangente en -1 ?

$$f(-1) = \boxed{-2}$$

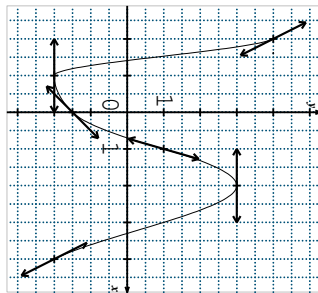
$$f'(-1) = \boxed{0}$$

Tangente en -1 :

$$y = f'(-1) \times (x - (-1)) + f(-1)$$

$$= 0(x + 1) - 2$$

$$= \boxed{-2}$$



$f(2) = ?$
 $f'(2) = ?$

Equation de la
 tangente en 2 ?

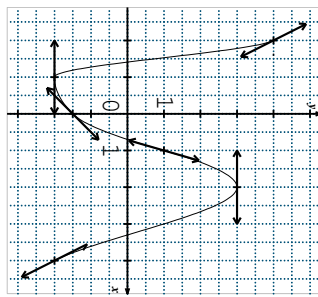
$$f(2) = \boxed{3}$$

$$f'(2) = \boxed{0}$$

Tangente en 2 :

$$y = f'(2) \times (x - 2) + f(2)$$

$$= 0(x - 2) + 3 = \boxed{3}$$



$f(-2) = ?$
 $f'(-2) = ?$

Equation de la
 tangente en -2 ?

$$f(-2) = \boxed{4}$$

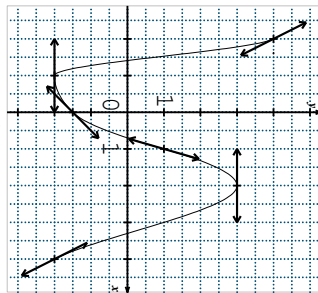
$$f'(-2) = \boxed{-2}$$

Tangente en -2 :

$$y = f'(-2) \times (x - (-2)) + f(-2)$$

$$= -2(x + 2) + 4$$

$$= \boxed{-2x}$$



$f(1) = ?$
 $f'(1) = ?$

Equation de la
 tangente en 1 ?

$$f(1) = \boxed{1}$$

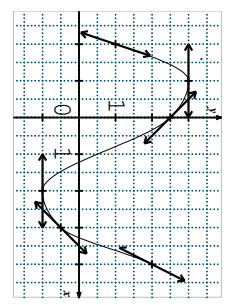
$$f'(1) = \boxed{3}$$

Tangente en 1 :

$$y = f'(1) \times (x - 1) + f(1)$$

$$= 3(x - 1) + 1$$

$$= \boxed{3x - 2}$$



$f(0) = ?$
 $f'(0) = ?$

Equation de la
 tangente en 0 ?

$$f(0) = \boxed{2,5}$$

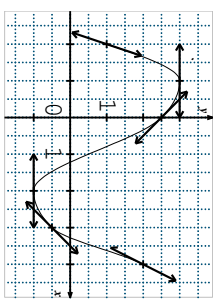
$$f'(0) = \boxed{-1}$$

Tangente en 0 :

$$y = f'(0) \times (x - 0) + f(0)$$

$$= -1(x - 0) + 2,5$$

$$= \boxed{-x + 2,5}$$



$f(-1) = ?$
 $f'(-1) = ?$

Equation de la
 tangente en -1 ?

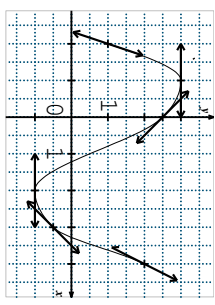
$$f(-1) = \boxed{3}$$

$$f'(-1) = \boxed{0}$$

Tangente en -1 :

$$y = f'(-1) \times (x - (-1)) + f(-1)$$

$$= 0(x + 1) + 3 = \boxed{3}$$



$f(-2) = ?$
 $f'(-2) = ?$

Equation de la
 tangente en -2 ?

$$f(-2) = \boxed{1}$$

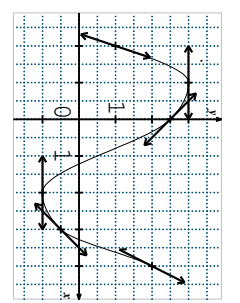
$$f'(-2) = \boxed{3}$$

Tangente en -2 :

$$y = f'(-2) \times (x - (-2)) + f(-2)$$

$$= 3(x + 2) + 1$$

$$= \boxed{3x + 8}$$



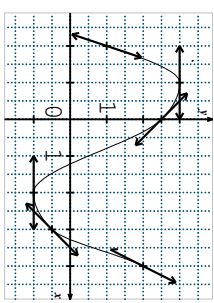
$f(4) = ?$
 $f'(4) = ?$

Equation de la
 tangente en 4 ?

$$f(4) = ?$$

$$f'(4) = ?$$

Equation de la
 tangente en 4 ?



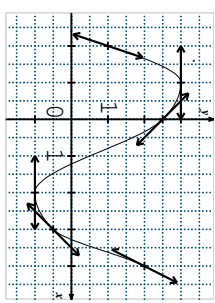
$f(3) = ?$
 $f'(3) = ?$

Equation de la
 tangente en 3 ?

$$f(3) = ?$$

$$f'(3) = ?$$

Equation de la
 tangente en 3 ?



$f(2) = ?$
 $f'(2) = ?$

Equation de la
 tangente en 2 ?

$$f(2) = ?$$

$$f'(2) = ?$$

Equation de la
 tangente en 2 ?

$$f(2) = \boxed{-1}$$

$$f'(2) = \boxed{0}$$

Tangente en 2 :

$$\begin{aligned} y &= f'(2) \times (x - 2) + f(2) \\ &= 0(x - 2) - 1 \\ &= \boxed{-1} \end{aligned}$$

$$f(x) = 3x^2 + 2x - 4$$

Equation de la tangente au point d'abscisse 2 ?

$$f(2) = 3 \times 2^2 + 2 \times 2 - 4 = \boxed{12}$$

$$f'(x) = 3 \times 2x + 2 \times 1 = 6x + 2$$

$$\text{Donc } f'(2) = 6 \times 2 + 2 = \boxed{14}$$

Tangente en 2 :

$$\begin{aligned} y &= f'(2) \times (x - 2) + f(2) \\ &= 14(x - 2) + 12 \\ &= \boxed{14x - 16} \end{aligned}$$

$$f(x) = -3x^2 + 4x - 5$$

Equation de la tangente au point d'abscisse -2 ?

$$f(-2) = -3 \times (-2)^2 + 4 \times (-2) - 5 = \boxed{-25}$$

$$f'(x) = -3 \times 2x + 4 \times 1 = -6x + 4$$

$$\text{Donc } f'(-2) = -6 \times (-2) + 4 = \boxed{16}$$

Tangente en -2 :

$$\begin{aligned} y &= f'(-2) \times (x - (-2)) + f(-2) \\ &= 16(x + 2) - 25 \\ &= \boxed{16x + 7} \end{aligned}$$

$$f(x) = \frac{1}{x} + 2x - 4$$

Equation de la tangente au point d'abscisse 2 ?

$$f(3) = \boxed{-0,5}$$

$$f'(3) = \boxed{1}$$

Tangente en 3 :

$$\begin{aligned} y &= f'(3) \times (x - 3) + f(3) \\ &= 1(x - 3) - 0,5 \\ &= \boxed{x - 3,5} \end{aligned}$$

$$f(x) = 3x^2 + 2x - 4$$

Equation de la tangente au point d'abscisse -1 ?

$$f(-1) = 3 \times (-1)^2 + 2 \times (-1) - 4 = \boxed{-3}$$

$$f'(x) = 3 \times 2x + 2 \times 1 = 6x + 2$$

$$\text{Donc } f'(-1) = 6 \times (-1) + 2 =$$

$$\boxed{-4}$$

Tangente en -1 :

$$\begin{aligned} y &= f'(-1) \times (x - (-1)) + f(-1) \\ &= -4(x + 1) - 3 \\ &= \boxed{-4x - 7} \end{aligned}$$

$$f(x) = x^3 + 3x^2 - 4x + 2$$

Equation de la tangente au point d'abscisse 1 ?

$$f(1) = 1^3 + 3 \times 1^2 - 4 \times 1 + 2 = \boxed{2}$$

$$f'(x) = 3x^2 + 6x - 4$$

$$\text{Donc } f'(1) = 3 \times 1^2 + 6 \times 1 - 4 = \boxed{5}$$

Tangente en 1 :

$$\begin{aligned} y &= f'(1) \times (x - 1) + f(1) \\ &= 5(x - 1) + 2 \\ &= \boxed{5x - 3} \end{aligned}$$

$$f(x) = \frac{2x - 3}{x - 2}$$

Equation de la tangente au point d'abscisse 3 ?

$$f(4) = \boxed{2}$$

$$f'(4) = \boxed{2}$$

Tangente en 4 :

$$\begin{aligned} y &= f'(4) \times (x - 4) + f(4) \\ &= 2(x - 4) + 2 \\ &= \boxed{2x - 6} \end{aligned}$$

$$f(x) = -4x^2 + 3x + 2$$

Equation de la tangente au point d'abscisse 3 ?

$$f(3) = -4 \times 3^2 + 3 \times 3 + 2 = \boxed{-25}$$

$$f'(x) = -4 \times 2x + 3 \times 1 = -8x + 3$$

$$\text{Donc } f'(3) = -8 \times 3 + 3 = \boxed{-21}$$

Tangente en 3 :

$$\begin{aligned} y &= f'(3) \times (x - 3) + f(3) \\ &= -21(x - 3) - 25 \\ &= \boxed{-21x + 38} \end{aligned}$$

$$f(x) = 3x^3 + 2x - 5$$

Equation de la tangente au point d'abscisse 2 ?

$$f(2) = 3 \times 2^3 + 2 \times 2 - 5 = \boxed{23}$$

$$f'(x) = 9x^2 + 2$$

$$\text{Donc } f'(2) = 9 \times 2^2 + 2 = \boxed{38}$$

Tangente en 2 :

$$\begin{aligned} y &= f'(2) \times (x - 2) + f(2) \\ &= 38(x - 2) + 23 \\ &= \boxed{38x - 53} \end{aligned}$$

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

Equation de la tangente au point d'abscisse 4 ?

$$f(2) = \frac{1}{2} + 2 \times 2 - 4 = \boxed{0,5}$$

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

$$\text{Donc } f'(2) = -\frac{1}{2^2} + 2 = \boxed{1,75}$$

Tangente en 2 :

$$\begin{aligned} y &= f'(2) \times (x - 2) + f(2) \\ &= 1,75(x - 2) + 0,5 \\ &= \boxed{1,75x - 3} \end{aligned}$$

$$f(3) = \frac{2 \times 3 - 3}{3 - 2} = \boxed{3}$$

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

$$\text{Donc } f'(3) = \frac{-1}{(3-2)^2} = \boxed{-1}$$

Tangente en 3 :

$$\begin{aligned} y &= f'(3) \times (x - 3) + f(3) \\ &= -1(x - 3) + 3 \\ &= \boxed{-x + 6} \end{aligned}$$

$$f(4) = \frac{4^2 + 1}{4 - 2} = \boxed{8,5}$$

$$f'(x) = \frac{x^2 - 4x - 1}{(x-2)^2}$$

$$\text{Donc } f'(4) = \frac{4^2 - 4 \times 4 - 1}{(4-2)^2} = \boxed{-0,25}$$

Tangente en 4 :

$$\begin{aligned} y &= f'(4) \times (x - 4) + f(4) \\ &= -0,25(x - 4) + 8,5 \\ &= \boxed{-0,25x + 9,5} \end{aligned}$$