CoAnim - Fonctions dérivées

2- Deuxieme exemple : DERIVEE DES FONCTIONS AFFINES DU TYPE : $f(t) = a\,t + b$

a	b	$f(t)$	$f'(t) = \frac{df}{dt}(t)$
1	**0**	$f(t) = t$	$f'(t) = \frac{df}{dt}(t) = 1$
2	**0**	$f(t) = 2\,t$	$f'(t) = \frac{df}{dt}(t) = 2$
2	**0**		
2	**1**		
2	**-5**		
10	**-30**		
-5	**0**		
-5	**10**		

Si $f(t) = a\,t + b$ alors $f'(t) = \frac{df}{dt}(t) =$

3- Troisieme exemple : DERIVEE DES FONCTIONS DU TYPE : $f(t) = a\,t^2 + b$

a	b	$f(t) = at^2 + b$	$f'(t) = \frac{df}{dt}(t)$
1	**0**	$f(t) = t^2$	$f'(t) = \frac{df}{dt}(t) = 2\,t$
5	**0**	$f(t) = 5\,t^2$	$f'(t) = \frac{df}{dt}(t) = 10\,t$
5	**100**		
-5	**100**		
-5	**0**		

Si $f(t) = a\,t^2 + b$ alors $f'(t) = \frac{df}{dt}(t) =$

4- QUATRIEME EXEMPLE : DERIVEE DES FONCTIONS DU TYPE : $f(t) = \cos(a\,t + b)$

a	b	$f(t) = \cos(a\,t + b)$	$f'(t) = \frac{df}{dt}(t)$
1	**0**	$f(t) = \cos(t)$	$f'(t) = \frac{df}{dt}(t) = -sin(t)$
2	**0**	$f(t) = \cos(2\,t)$	$f'(t) = \frac{df}{dt}(t) = -2\,sin(2\,t)$
3	**0**		
1	**0,5**		
1	**-0,5**		
3	**0,5**		

Si $f(t) = \cos(a\,t + b)$ alors $f'(t) = \frac{df}{dt}(t) =$

5- CINQUIEME EXEMPLE : DERIVEE DES FONCTIONS DU TYPE : $f(t) = \sin(a\,t + b)$

a	b	$f(t) = \sin(a\,t + b)$	$f'(t) = \frac{df}{dt}(t)$
1	**0**	$f(t) = \sin(t)$	$f'(t) = \frac{df}{dt}(t) =$
2	**0**	$f(t) = \sin(2\,t)$	$f'(t) = \frac{df}{dt}(t) =$
3	**0**		
1	**0,5**		
1	**-0,5**		
3	**0,5**		

Si $f(t) = \sin(a\,t + b)$ alors $f'(t) = \frac{df}{dt}(t) =$

6- SIXIEME EXEMPLE : DERIVEE DES FONCTIONS DU TYPE : $f(t) = a\,t^2 + b\,t + c$

a	c	b	$f(t) = at^2 + bt + c$	$f'(t) = \frac{df}{dt}(t)$
1	**0**	**0**	$f(t) = t^2$	$f'(t) = \frac{df}{dt}(t) = 2\,t$
0,1	**-2**	**1**	$f(t) = 0{,}1\,t^2 - 2t + 1$	$f'(t) = \frac{df}{dt}(t) = 0{,}2\,t - 2$
-0,1	**10**	**2024**		
-1	**15**	**-500**		
2	**45**	**25**		

Si $f(t) = a\,t^2 + b\,t + c$ alors $f'(t) = \frac{df}{dt}(t) =$