Trigonométrie

Question 1/35

$$\sin(x) - \sin(y)$$

Réponse 1/35

$$2\cos\left(\frac{x+y}{2}\right)\sin\left(\frac{x-y}{2}\right)$$

Question 2/35

$$\sin\left(\frac{\pi}{2} - x\right)$$

Réponse 2/35

$$\cos(x)$$

Question 3/35

$$2\cos\left(\frac{x+y}{2}\right)\cos\left(\frac{x-y}{2}\right)$$

Réponse 3/35

$$\cos(x) + \cos(y)$$

Question 4/35

$$\frac{\cot^2(x) - 1}{2\cot(x)}$$

Réponse 4/35

$$\cot(2x)$$

Question 5/35

$$\cos(x)\cos(y)$$

Réponse 5/35

$$\frac{1}{2}(\cos(x+y)+\cos(x-y))$$

Question 6/35

$$\sin(2x)$$

Réponse 6/35

$$2\sin(x)\cos(x)$$

Question 7/35

$$\cos(x)$$

$$t = \tan\left(\frac{x}{2}\right)$$

Réponse 7/35

$$\frac{1-t^2}{1+t^2}$$

$$t = \tan\left(\frac{x}{2}\right)$$

Question 8/35

$$\frac{1}{2}(\cos(x-y)-\cos(x+y))$$

Réponse 8/35

$$\sin(x)\sin(y)$$

Question 9/35

$$\cot(x+y)$$

Réponse 9/35

$$\frac{\cot(x)\cot(y)-1}{\cot(x)+\cot(y)}$$

Question 10/35

$$\cos(2x)$$

Réponse 10/35

$$\cos^2(x) - \sin^2(x) = 2\cos^2(x) - 1 = 1 - 2\sin^2(x)$$

Question 11/35

$$-2\sin\left(\frac{x+y}{2}\right)\sin\left(\frac{x-y}{2}\right)$$

Réponse 11/35

$$\cos(x) - \cos(y)$$

Question 12/35

$$\sin^2(x)$$

Réponse 12/35

$$\frac{1-\cos(2x)}{2}$$

Question 13/35

$$\frac{2t}{1+t^2}$$

$$t = \tan\left(\frac{x}{2}\right)$$

Réponse 13/35

$$\sin(x)$$

$$t = \tan\left(\frac{x}{2}\right)$$

Question 14/35

$$-\cos(x)$$

Réponse 14/35

$$\cos(\pi - x)$$

Question 15/35

$$\cot(x - y)$$

Réponse 15/35

$$\frac{-\cot(x)\cot(y)-1}{\cot(x)-\cot(y)}=\frac{\cot(x)\cot(y)+1}{\cot(y)-\cot(x)}$$

Question 16/35

$$\tan(x+y)$$

Réponse 16/35

$$\frac{\tan(x) + \tan(y)}{1 - \tan(x)\tan(y)}$$

Question 17/35

$$\cos(x - y)$$

Réponse 17/35

$$\cos(x)\cos(y) + \sin(x)\sin(y)$$

Question 18/35

$$\sin(x)$$

Réponse 18/35

$$\sin(\pi - x)$$

Question 19/35

$$\sin(x + \pi)$$

Réponse 19/35

$$-\sin(x)$$

Question 20/35

$$\sin(x)\cos(y) - \sin(y)\cos(x)$$

Réponse 20/35

$$\sin(x - y)$$

Question 21/35

$$\tan(x)$$

$$t = \tan\left(\frac{x}{2}\right)$$

Réponse 21/35

$$\frac{2t}{1-t^2}$$

$$t = \tan\left(\frac{x}{2}\right)$$

Question 22/35

$$\cos(x + y)$$

Réponse 22/35

$$\cos(x)\cos(y) - \sin(x)\sin(y)$$

Question 23/35

$$\sin(x)$$

Réponse 23/35

$$\cos\left(\frac{\pi}{2} - x\right)$$

Question 24/35

$$\cos^2(x)$$

Réponse 24/35

$$\frac{1+\cos(2x)}{2}$$

Question 25/35

$$\tan(x - y)$$

Réponse 25/35

$$\frac{\tan(x) - \tan(y)}{1 + \tan(x)\tan(y)}$$

Question 26/35

$$\frac{1-t^2}{2t}$$

$$t = \tan\left(\frac{x}{2}\right)$$

Réponse 26/35

$$\cot(x)$$

$$t = \tan\left(\frac{x}{2}\right)$$

Question 27/35

$$\cos(x)\sin(y)$$

Réponse 27/35

$$\frac{1}{2}(\sin(x+y)-\sin(x-y))$$

Question 28/35

$$\sin(x) + \sin(y)$$

Réponse 28/35

$$2\sin\left(\frac{x+y}{2}\right)\cos\left(\frac{x-y}{2}\right)$$

Question 29/35

Valeurs remarquables

Réponse 29/35

	0	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$
$\sin$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
$\cos$	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
$\tan$	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	$-$
$\cot$	$-$	$\sqrt{3}$	1	$\frac{1}{\sqrt{3}}$	0

Question 30/35

$$\frac{1}{2}(\sin(x+y)+\sin(x-y))$$

Réponse 30/35

$$\sin(x)\cos(y)$$

Question 31/35

$$\cos(x + \pi)$$

Réponse 31/35

$$-\cos(x)$$

Question 32/35

$$\sin(x + y)$$

Réponse 32/35

$$\sin(x)\cos(y) + \sin(y)\cos(x)$$

Question 33/35

$$\cos\left(x + \frac{\pi}{2}\right)$$

Réponse 33/35

$$-\sin(x)$$

Question 34/35

$$\cos(x)$$

Réponse 34/35

$$\sin\left(x + \frac{\pi}{2}\right)$$

Question 35/35

$$\frac{2\tan(x)}{1-\tan^2(x)}$$

Réponse 35/35

$$\tan(2x)$$