Trigonometrie

## Question 1/34

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

## Réponse 1/34

$$\cot(x+y)$$

# Question 2/34

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

#### Réponse 2/34

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

# Question 3/34

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

 $\sin(x)$ 

# Réponse 3/34

$$\frac{2t}{1+t^2}$$
$$t = \tan\left(\frac{x}{2}\right)$$

# Question 4/34

 $\sin(2x)$ 

# Réponse 4/34

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

# Question 5/34

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

### Réponse 5/34

 $\cos(x)$ 

# Question 6/34

$$\sin(x-y)$$

#### Réponse 6/34

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

# Question 7/34

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

### Réponse 7/34

 $\cos(x)$ 

# Question 8/34

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

 $\cot(x)$ 

# Réponse 8/34

$$\frac{1 - t^2}{2t}$$
$$t = \tan\left(\frac{x}{2}\right)$$

# Question 9/34

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

## Réponse 9/34

$$\tan(x+y)$$

#### Question 10/34

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

# Réponse 10/34

$$\cos^2(x)$$

### Question 11/34

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

#### Réponse 11/34

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

# Question 12/34

 $\sin(x)$ 

# Réponse 12/34

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

# Question 13/34

$$\cos(x-y)$$

#### Réponse 13/34

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

## Question 14/34

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

# Réponse 14/34

$$-\cos(x)$$

## Question 15/34

$$\frac{2t}{1-t^2}$$
$$t = \tan\left(\frac{x}{2}\right)$$

# Réponse 15/34

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

# Question 16/34

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

# Réponse 16/34

$$\cot(2x)$$

## Question 17/34

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

### Réponse 17/34

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

# Question 18/34

$$-\sin(x)$$

### Réponse 18/34

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

#### Question 19/34

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

## Réponse 19/34

$$\cos(2x)$$

## Question 20/34

 $\sin(x)$ 

### Réponse 20/34

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

### Question 21/34

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

### Réponse 21/34

 $\tan(2x)$ 

#### Question 22/34

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

#### Réponse 22/34

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

# Question 23/34

$$\sin^2(x)$$

## Réponse 23/34

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

#### Question 24/34

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

### Réponse 24/34

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

# Question 25/34

$$-\sin(x)$$

### Réponse 25/34

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

# Question 26/34

$$-\cos(x)$$

### Réponse 26/34

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

## Question 27/34

 $\cos(x)$ 

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

## Réponse 27/34

$$\frac{1 - t^2}{1 + t^2}$$
$$t = \tan\left(\frac{x}{2}\right)$$

#### Question 28/34

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

#### Réponse 28/34

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

# Question 29/34

$$\tan(x-y)$$

### Réponse 29/34

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

#### Question 30/34

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

## Réponse 30/34

$$\sin(x+y)$$

# Question 31/34

$$\cot(x-y)$$

#### Réponse 31/34

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

### Question 32/34

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

# Réponse 32/34

$$\cos(x+y)$$

#### Question 33/34

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

### Réponse 33/34

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

#### Question 34/34

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

## Réponse 34/34

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