# **PRINTABLE VERSION**

#### Quiz 4

# You scored 0 out of 100

Question 1

### You did not answer the question.

Calculate the integral:

$$\int (\sec(2x+1))^2 \, \mathrm{d}x$$

a) 
$$\frac{1}{2} \sec(2x+1) + C$$
  
b)  $\tan(2x+1) + C$   
c)  $-\frac{1}{2} \tan(2x+1) + C$   
d)  $\frac{1}{6} (\sec(2x+1))^3 + C$   
e)  $\frac{1}{2} \tan(2x+1) + C$ 

#### Question 2

### You did not answer the question.

$$\int \frac{1}{2} \frac{\sec^2(x)}{\sqrt{\tan(x) + 1}} \, \mathrm{d}x$$

a) 
$$4\sqrt{\tan(x) + 1} + C$$
  
b)  $\sqrt{\tan(x) + 1} + C$   
c)  $\frac{1}{4}\sec(x)^2 + C$ 

d) 
$$\frac{1}{2} \sec(x) + C$$
  
e) 
$$\frac{1}{2} \sqrt{\tan(x) + 1} + C$$

# You did not answer the question.

Calculate the integral:

$$\int \frac{4 \left( \arcsin(x) \right)^5}{\sqrt{1-x^2}} \, \mathrm{d}x$$

a) 
$$\frac{1}{24} (\arcsin(x))^4 + C$$
  
b)  $\frac{2}{3} (\arcsin(x))^6 + C$   
c)  $\frac{1}{20} \sqrt{1 - x^2} + C$   
d)  $\frac{2}{3} \sqrt{1 - x^2} + C$ 

e) ( $\arcsin(x)$ )<sup>4</sup> + C

#### Question 4

## You did not answer the question.

$$\int 3 x \ln(x^6) \, \mathrm{d}x$$

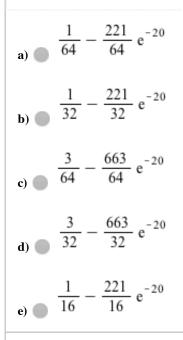
a) 
$$\frac{1}{2} \ln(x^{6}) + \frac{9}{2} x^{2} + C$$
  
b) 
$$\frac{3}{2} x^{2} \ln(x^{6}) + C$$
  
c) 
$$-\frac{3}{2} x^{2} \ln(x^{6}) + \frac{3}{2} x^{2} + C$$

d) 
$$\frac{3}{2}x^2 \ln(x^6) - \frac{9}{2}x^2 + C$$
  
e)  $\frac{1}{6}\ln(x^6) - \frac{9}{2}x^2 + C$ 

## You did not answer the question.

Calculate the integral:

$$\int_0^5 x^2 e^{-4x} dx$$



#### **Question 6**

### You did not answer the question.

$$\int_{0}^{\frac{1}{2}} 6x \cos(\pi x) dx$$

a) 
$$\frac{\frac{3}{2}}{\pi^2} \frac{\frac{-2+\pi}{\pi^2}}{\pi^2}$$
  
b)  $\frac{3(-2+\pi)}{\pi^2}$ 

c) 
$$\frac{9}{2} \frac{-2 + \pi}{\pi^2}$$
  
d) 
$$\frac{9(-2 + \pi)}{\pi^2}$$
  
e) 
$$\frac{6(-2 + \pi)}{\pi^2}$$

## You did not answer the question.

Calculate the integral:

$$\int 2 e^x \cos(x) dx$$

a) 
$$e^{x} \sin(x) + e^{x} \cos(x) + C$$
  
b)  $3e^{x} \cos(x) + 3e^{x} \sin(x) + C$   
c)  $2e^{x} \sin(x) + 2e^{x} \cos(x) + C$   
d)  $\frac{1}{2}e^{x} \sin(x) + \frac{1}{2}e^{x} \cos(x) + C$   
e)  $\frac{3}{2}e^{x} \sin(x) + \frac{3}{2}e^{x} \cos(x) + C$ 

#### Question 8

# You did not answer the question.

$$\int_0^1 6x \arctan(x^2) \, \mathrm{d}x$$

a) 
$$\frac{3}{4}\pi - \frac{3}{2}\ln(2)$$
  
b)  $\frac{9}{4}\pi - \frac{9}{2}\ln(2)$ 

c) 
$$\frac{3}{2}\pi - 3\ln(2)$$
  
d)  $\frac{3}{8}\pi - \frac{3}{4}\ln(2)$   
e)  $\frac{9}{8}\pi - \frac{9}{4}\ln(2)$ 

# You did not answer the question.

Calculate the integral:

a) 
$$\frac{7}{2}x^{2}\sinh(2x) - \frac{7}{2}x\cosh(2x) + C$$
  
b) 
$$\frac{21}{4}x^{2}\sinh(2x) - \frac{21}{4}x\cosh(2x) + \frac{21}{8}\sinh(2x) + C$$
  
c) 
$$7x^{2}\sinh(2x) - 7x\cosh(2x) + \frac{7}{2}\sinh(2x) + C$$
  
d) 
$$\frac{7}{2}x^{2}\sinh(2x) + \frac{7}{4}\sinh(2x) + C$$
  
e) 
$$\frac{7}{2}x^{2}\sinh(2x) - \frac{7}{2}x\cosh(2x) + \frac{7}{4}\sinh(2x) + C$$

Question 10

### You did not answer the question.

Calculate the integral:

 $\int 11 \sin(\ln(x)) dx$ 

 $\int 7 x^2 \cosh(2x) dx$ 

С

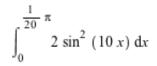
a) 11 
$$x \sin(\ln(x)) - 11 x \cos(\ln(x)) + C$$

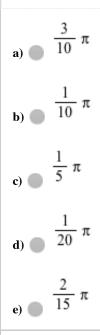
**b)** 
$$\int \frac{11}{2} x \cos(\ln(x)) + \frac{11}{2} x \sin(\ln(x)) + C$$

c) 
$$\frac{33}{4} x \sin(\ln(x)) - \frac{33}{4} x \cos(\ln(x)) + C$$
  
d) 
$$\frac{-\frac{11}{2} \cos(\ln(x)) + C}{-\frac{11}{2} x \sin(\ln(x)) - \frac{11}{2} x \cos(\ln(x)) + C}$$

### You did not answer the question.

Calculate the given integral:





#### Question 12

### You did not answer the question.

Calculate the given integral:

$$\left[\left(\cos(11 x)\right)^4 \left(\sin(11 x)\right)^3 dx\right]$$

a) 
$$\frac{1}{55} (\sin(11x))^5 + \frac{1}{77} (\sin(11x))^7 + C$$

b) 
$$-\frac{1}{55} (\cos(11 x))^5 + \frac{1}{77} (\cos(11 x))^7 + C$$
  
c) 
$$-\frac{1}{132} (\cos(11 x))^5 + C$$
  
d) 
$$\frac{1}{55} (\cos(11 x))^5 - \frac{1}{77} (\cos(11 x))^7 + C$$
  
e) 
$$-\frac{1}{5} (\cos(11 x))^5 + \frac{1}{7} (\cos(11 x))^7 + C$$

# You did not answer the question.

Calculate the given integral:

$$\int 2 \csc^2 (5 x) dx$$

a) 
$$-\frac{2}{5} \sin^{2} (5x) + C$$
  
b) 
$$-2 \cot(5x) + C$$
  
c) 
$$-\frac{2}{5} \sin(5x) \cos(5x) + C$$
  
d) 
$$\frac{2}{5} \cot(5x) + C$$
  
e) 
$$-\frac{2}{5} \cot(5x) + C$$

Question 14

# You did not answer the question.

Calculate the given integral:

 $\int 2 \tan^3 (4x) \, dx$ 

a) 
$$\frac{1}{8} \tan^4 (4x) + C$$

b) 
$$-\frac{1}{4} \tan^{2} (4x) - \frac{1}{2} \ln |\cos(4x)| + c$$
  
c) 
$$\frac{1}{8} \tan^{4} (4x) + 8 \ln |\sin(4x)| + C$$
  
d) 
$$\frac{1}{4} \tan^{2} (4x) + \frac{1}{2} \ln |\cos(4x)| + C$$
  
e) 
$$\tan^{2} (4x) + 2 \ln |\cos(4x)| + C$$

## You did not answer the question.

Calculate the given integral:

$$\int 5\sin(8x)\cos(9x)\,\mathrm{d}x$$

С

a) 
$$\frac{5}{34} \sin(8x) - \frac{5}{2} \sin(x) + C$$
  
b) 
$$-\frac{5}{2} \cos(8x) + \frac{5}{2} \cos(x) + C$$
  
c) 
$$-\frac{5}{2} \sin(17x) + \frac{5}{2} \cos(x) + C$$
  
d) 
$$-\frac{5}{34} \cos(17x) + \frac{5}{2} \cos(x) + C$$
  
e) 
$$-\frac{5}{34} \sin(8x) + \frac{5}{2} \sin(x) + C$$

Question 16

## You did not answer the question.

Calculate the given integral:

 $\int 4 (\tan(11 x))^2 (\sec(11 x))^2 dx$ 

a) 
$$(12)^{3} + C$$

b) 
$$\frac{4}{33} (\tan(11 x))^3 + C$$
  
c) 
$$\frac{4}{33} (\tan(11 x))^3 (\sec(11 x))^2 + C$$
  
d) 
$$\frac{4}{33} (\sec(11 x))^3 + C$$
  
e) 
$$\frac{4}{3} (\sec(11 x))^3 + C$$

# You did not answer the question.

Calculate the given integral:

$$\int (\tan(2x))^4 \, \mathrm{d}x$$

a) 
$$\frac{1}{6} (\tan(2x))^5 + \frac{1}{2} \tan(2x) + \frac{1}{2} x + C$$
  
b) 
$$\frac{1}{6} (\tan(2x))^3 - \frac{1}{2} \tan(2x) + x + C$$
  
c) 
$$\frac{1}{6} \tan(2x)^4 + \frac{1}{2} \tan(2x) + x + C$$
  
d) 
$$\frac{1}{6} (\tan(2x))^5 - \frac{1}{2} (\tan(2x))^3 + \frac{1}{2} x + C$$
  
e) 
$$\frac{1}{6} (\tan(2x))^3 - \frac{1}{2} \tan(2x) + \frac{1}{2} x + C$$

Question 18

# You did not answer the question.

Calculate the given integral:

 $\int \sin(8x) \, \sin(2x) \, \mathrm{d}x$ 

a) 
$$\frac{1}{12}\sin(6x) - \frac{1}{20}\sin(10x) + C$$

b) 
$$\frac{1}{12}\cos(8x) - \frac{1}{20}\cos(10x) + C$$
c) 
$$\frac{1}{12}\sin(6x) + \frac{1}{20}\sin(10x) + C$$
d) 
$$\frac{1}{16}\sin(6x) - \frac{1}{20}\sin(8x) + C$$
e) 
$$\frac{1}{16}\cos(8x) + \frac{1}{12}\sin(6x) + C$$

## You did not answer the question.

Calculate the given integral:

$$\int 4 \sec^4 (6 x) dx$$

a)   

$$\frac{2}{9} \sec^{5} (6x) + C$$
b)   

$$\frac{4}{3} \tan^{3} (6x) + 4 \tan(6x) + C$$
c)   

$$\frac{2}{9} \sec^{5} (6x) \tan(6x) + C$$
d)   

$$\frac{-\frac{2}{9}}{9} \tan^{3} (6x) - \frac{2}{3} \tan(6x) + C$$
e)   

$$\frac{2}{9} \tan^{3} (6x) + \frac{2}{3} \tan(6x) + C$$

Question 20

## You did not answer the question.

Calculate the given integral:

 $\int 4 \tan^5 (3 x) dx$ 

a) 
$$\frac{2}{9} \tan^6 (3x) + \frac{4}{3} \ln|\sec(3x)| + C$$

b) 
$$\frac{1}{3} \tan^{4} (3 x) + \frac{4}{3} \ln|\sec(3 x)| + C$$
  
c) 
$$\frac{1}{3} \tan^{4} (3 x) - \frac{2}{3} \tan^{2} (3 x) + \frac{4}{3} \ln|\sec(3 x)| + C$$
  
d) 
$$\frac{4}{15} \tan^{5} (3 x) + \frac{4}{3} \ln|\sec(3 x)| + C$$
  
e) 
$$\frac{2}{9} \tan^{6} (3 x) - \frac{2}{3} \tan^{2} (3 x) + \frac{4}{3} \ln|\sec(3 x)| + C$$