

# Первообразная

*Теоретический тест*

gizatulina.lima@gmail.ru

1.

$$f(x) = x^4$$

1

$$F(x) = \frac{x^4}{4}$$

2

$$F(x) = \frac{x^5}{5}$$

3

$$F(x) = -\frac{x^5}{5}$$



2.

$$f(x) = x$$

1

$$F(x) = \frac{x}{2}$$

2

$$F(x) = \frac{x^2}{2}$$

3

$$F(x) = 2x$$



3.

$$f(x) = \frac{1}{x^7}$$

1

$$F(x) = -\frac{6}{x^6}$$

2

$$F(x) = -\frac{1}{8x^8}$$

3

$$F(x) = -\frac{1}{6x^6}$$



4.  $f(x) = 7x^6$

1  $F(x) = 7x^7$

2  $F(x) = x^7$

3  $F(x) = \frac{x^7}{7}$



5.

$$f(x) = \frac{6}{\sqrt{x}} + 5$$

1  $F(x) = 12\sqrt{x} + 5x$

2  $F(x) = 12\sqrt{x}$

3  $F(x) = 6\sqrt{x} + 5$



6.  $f(x) = \frac{2}{x}, x > 0$

1  $F(x) = \ln x$

2  $F(x) = 2x$

3  $F(x) = 2 \ln x$



7.  $f(x) = 2x - \cos x$

1  $F(x) = 2x - \sin x$

2  $F(x) = 2 + \sin x$

3  $F(x) = x^2 - \sin x$



8.

$$f(x) = 3 + 2 \sin x$$

1

$$F(x) = 3x - 2 \cos x$$

2

$$F(x) = 3x + 2 \cos x$$

3

$$F(x) = 3 - 2 \cos x$$



9.

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

1

$$F(x) = -3 \operatorname{tg} x$$

2

$$F(x) = 3 \operatorname{tg} x$$

3

$$F(x) = \frac{1}{3} \operatorname{tg} x$$



10.

$$f(x) = 18 \cos 9x$$

1

$$F(x) = 2 \sin x$$

2

$$F(x) = -2 \sin 9x$$

3

$$F(x) = 2 \sin 9x$$



11.

$$f(x) = 2 \sin 2x$$

1

$$F(x) = \cos 2x$$

2

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

3

$$F(x) = -\cos 2x$$



12.

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

1

$$F(x) = \frac{(2x - 3)^6}{6}$$

2

$$F(x) = \frac{(2x - 3)^6}{3}$$

3

$$F(x) = \frac{(2x - 3)^6}{12}$$



13.

$$f(x) = 28(1 - 7x)^3$$

1

$$F(x) = \frac{(1 - 7x)^4}{4}$$

2

$$F(x) = -(1 - 7x)^4$$

3

$$F(x) = -\frac{(1 - 7x)^4}{14}$$



14.  $f(x) = \frac{2}{(4x+3)^3}$

1

$$F(x) = -\frac{1}{4(4x+3)^2}$$

2

$$F(x) = -\frac{1}{16(4x+3)^2}$$

3

$$F(x) = -\frac{2}{(4x+3)^2}$$

