

# *Первообразная*

*Теоретический тест*

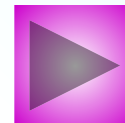
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1.  $f(x) = x^4$

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  $F(x) = 2 \ln x$

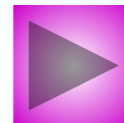


7.  $f(x) = 2x - \cos x$

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

