#### Устно вычислите значение производной

$$(5)' = 0$$

# (x)' = 1

# (5x)' = 5

## $\left(2x^4\right) = 8x^3$

### $(-0,5x^6)$ $-3x^5$

#### (2x-3)'=2

$$((2x-3)^3)' =$$

$$= (2x-3)' \cdot 3(2x-3)^2$$

$$= 6 \cdot (2x-3)^2$$

## $(e^x) = e^x$

$$\left(e^{3x+2}\right) =$$

$$=e^{3x+2}\cdot(3x+2)'$$

$$= 3e^{3x+2}$$

# $(\ln x)' = \frac{1}{x}$

$$\left(\ln(3x+5)\right)'=$$

$$3 \cdot \frac{3}{3x + 5} = \frac{3}{3x + 5}$$

$$1)y = \ln(2x - 7)$$

$$2)y = \ln(1+5x)$$

**7**)

 $y' = (e^{4x-12})'$ 

$$3) y = \log_3 x$$

$$4)y = \log_{0.3} x + \sin x$$

$$5)y = lqx - \cos x$$

$$6)y = x \ln x$$

1) 
$$y = \ln(2x - 7)$$
  $\frac{2}{2x - 7}$   $\frac{2}{5}$   
2)  $y = \ln(1 + 5x)$   $\frac{1}{x \ln 3}$   $\frac{1}{x \ln 0.3} + \cos x$   
4)  $y = \log_{0.3} x + \sin x$   $\frac{1}{x \ln 10} + \sin x$   
5)  $y = lqx - \cos x$   $\frac{1}{x \ln 10} + \sin x$   
6)  $y = x \ln x$   $\ln x + 1$   
 $y' = (e^{4x - 12})' = 4e^{4x - 12}$