# Дис 11.12

$f'(x) = 0$

$$\frac{f'(x_0 - h) - f'(x_0)}{h}$$

$$f(x) = (x+1)^2 (x+3)^3$$

$$f'(x) = 2(x+1)(x+3)^3 + 3(x+1)^2(x+3)^2$$

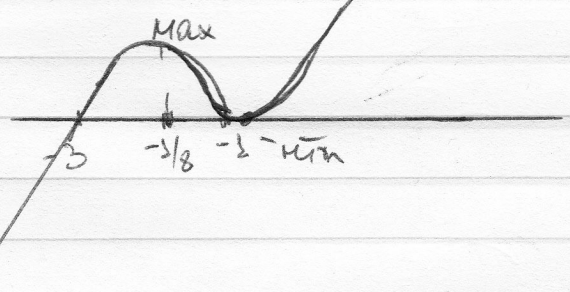
$$f'(x) = (x+1)(x+3)^2(2(x+3) + 3(x+1))$$

$$f'(x) = (x+1)(x+3)^2(5x+9)$$

$x_1 = -1$

$x_2 = -3$

$x_3 = -9/5 = -1\frac{4}{5} = -1{,}8$




$$e^z = \sum_{n=0}^{\infty} \frac{z^n}{n!}$$

$$e^{z_1 + z_2} = e^{z_1} e^{z_2}$$

$z = x + iy$

$$e^{iy} \sum_{n}^{\infty} \frac{(iy)^n}{n!}$$

$$\boxed{e^{iy} = \cos y + i \sin y}$$ Эйлер

$$e^z = e^{x+iy} = e^x e^{iy}$$

$e^x (\cos y + i \sin y)$