Построение графика функции с помощью производной

Построить график функции

$$y = x^3 - 4x$$

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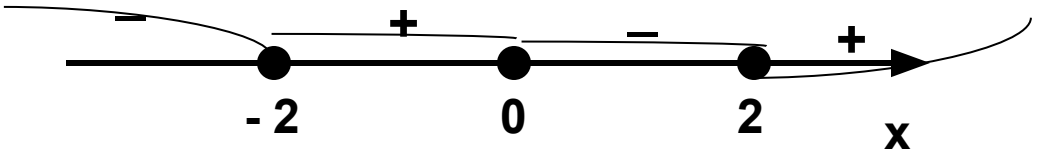
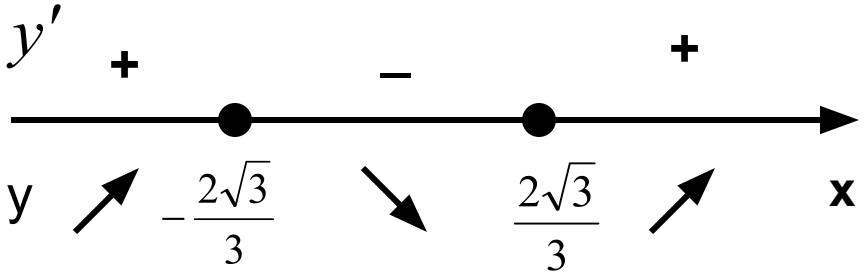
1) Область определения функции: $x \in R$, функция нечетная.

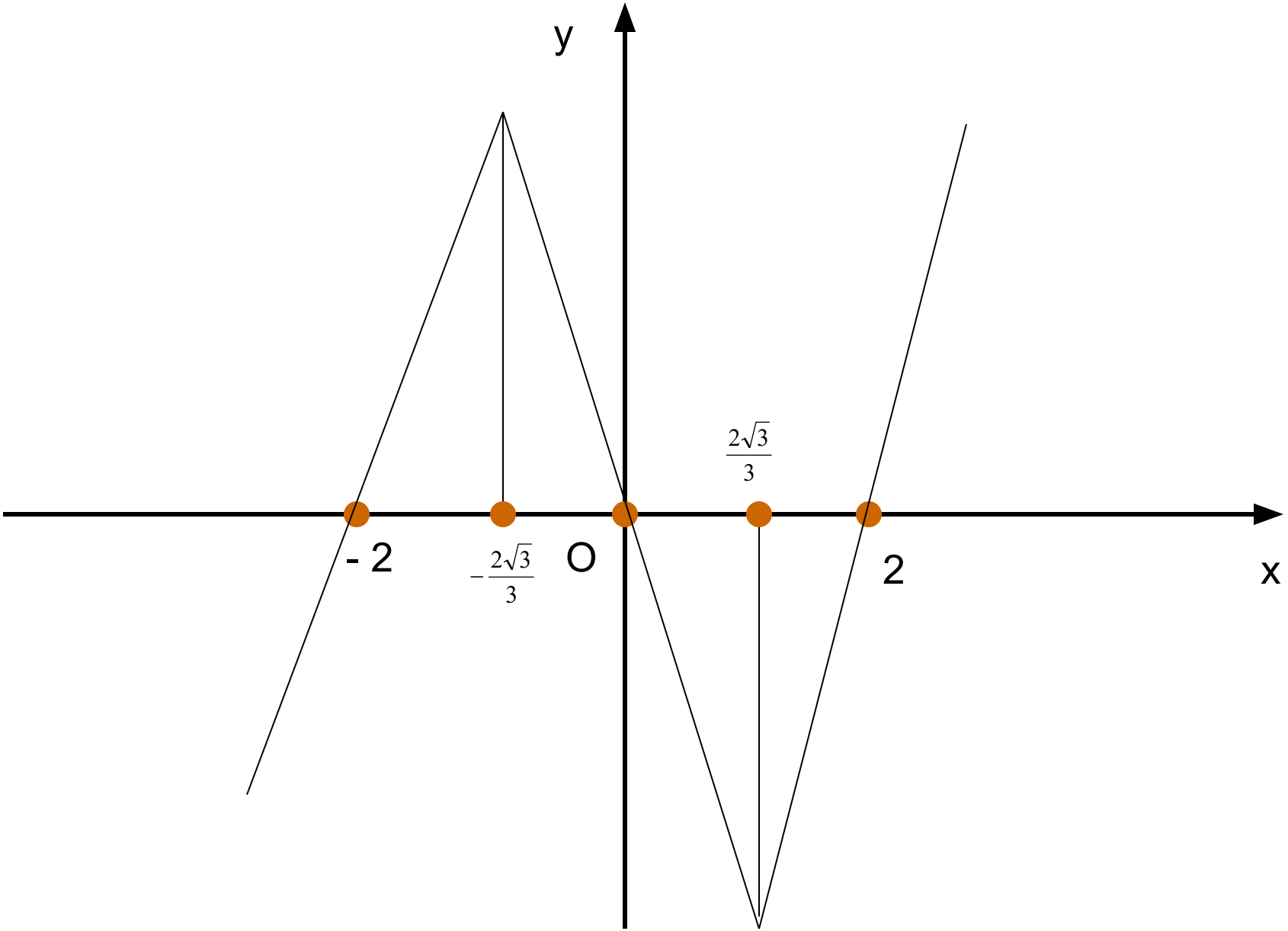
2) Нули функции: **X = - 2; 0; 2.**

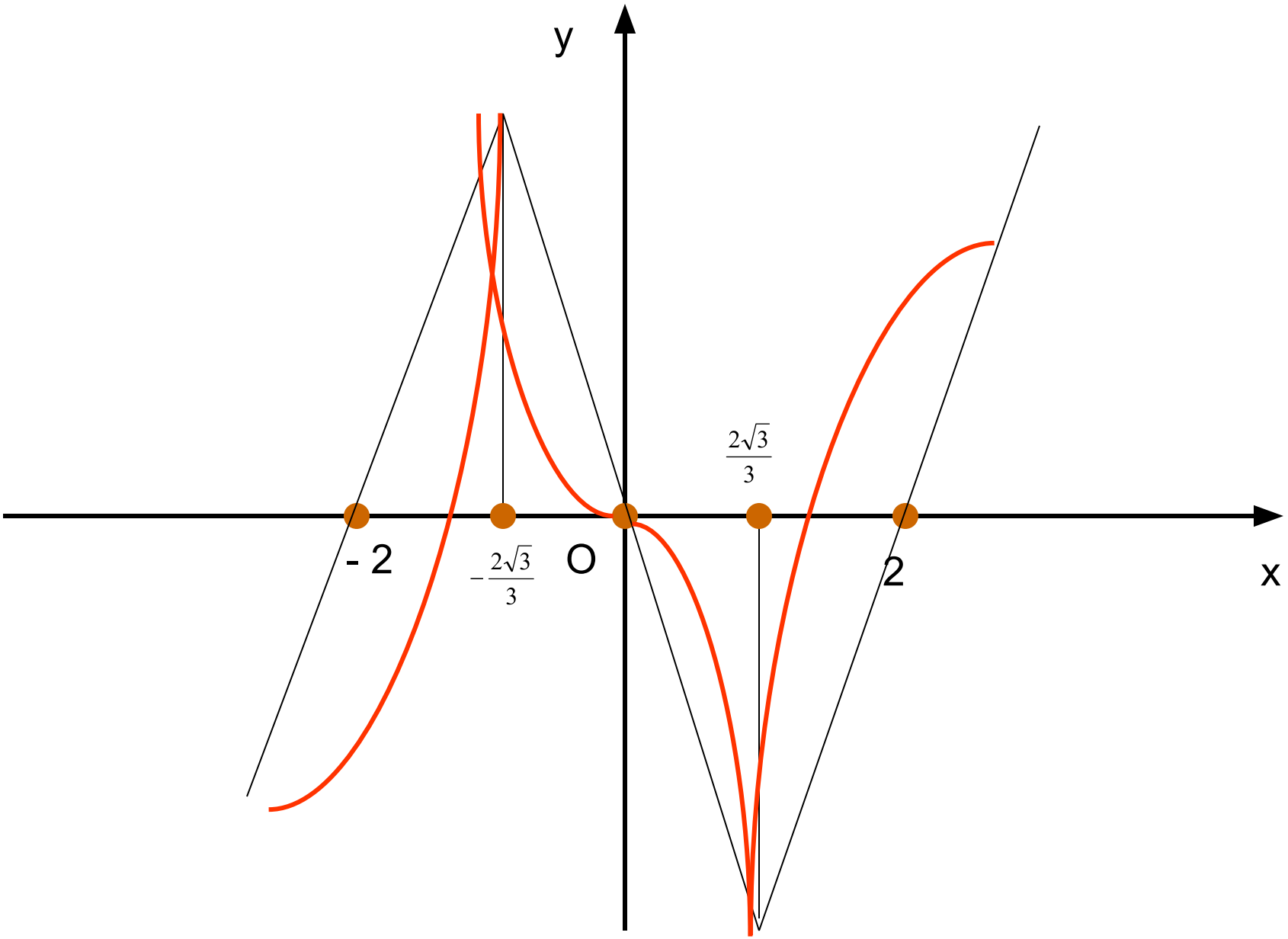


3) Производная $y' = 3x^2 - 4$, $y' = 0 \Leftrightarrow x = \pm\frac{2\sqrt{3}}{3} \approx \pm 1{,}13$



$$y\left(\pm\frac{2\sqrt{3}}{3}\right) = \mp\frac{16\sqrt{3}}{9} \approx \mp 3{,}02$$


y
x
O
- 2
$-\frac{2\sqrt{3}}{3}$
$\frac{2\sqrt{3}}{3}$
2


y
x
O
- 2
$-\frac{2\sqrt{3}}{3}$
$\frac{2\sqrt{3}}{3}$
2