YOU CAN FACTOR ANYTHING, NOW!

$f := x \rightarrow 27 \cdot x^2 + 55 \cdot x - 1280$

$$f := x \mapsto 27\,x^2 + 55\,x - 1280 \qquad \textbf{(1)}$$

$solve(f(x) = 0)$

$$-\frac{55}{54} + \frac{\sqrt{141265}}{54}, \; -\frac{55}{54} - \frac{\sqrt{141265}}{54} \qquad \textbf{(2)}$$

$$27 \cdot \left(x - \left(-\frac{55}{54} + \frac{\sqrt{141265}}{54} \right) \right) \cdot \left(x - \left(-\frac{55}{54} - \frac{\sqrt{141265}}{54} \right) \right)$$

$$27 \left(x + \frac{55}{54} + \frac{\sqrt{141265}}{54} \right) \left(x + \frac{55}{54} - \frac{\sqrt{141265}}{54} \right) \qquad \textbf{(3)}$$

$expand(\%)$

$$27\,x^2 + 55\,x - 1280 \qquad \textbf{(4)}$$