

4.7
17

$$y = \frac{2x^2}{x^2+x+1}$$

$\lim_{x \rightarrow \pm\infty} \frac{2x^2}{x^2+x+1} = 2 \rightarrow y=2$

$y' = \frac{4x(x^2+x+1) - 2x^2(2x+1)}{(x^2+x+1)^2} = \frac{2x^3 + 2x^2 + 4x}{(x^2+x+1)^2} \stackrel{1317}{=} \frac{2x(x^2+x+2)}{(x^2+x+1)^2} \rightarrow x=0, x=-2$

$-2 < x < 0$ \rightarrow $\max(-2, \frac{8}{3})$ $x > 0$ $x < -2$ \rightarrow $\min(0, 0)$

