

Question #12900

What is the limit, $\lim_{h \rightarrow 2} \frac{(1/3 - 2/(3h))}{(h - 2)}$?

Solution. Write $\frac{(1/3 - 2/(3h))}{(h - 2)} = \frac{\frac{h-2}{3h}}{h - 2} = \frac{1}{3h}$. Thus, $\lim_{h \rightarrow 2} \frac{(1/3 - 2/(3h))}{(h - 2)} =$

$$\lim_{h \rightarrow 2} \frac{1}{3h} = \frac{1}{6}.$$

Answer. 1/6.