

$$\begin{aligned}
 17. \quad & \lim_{x \rightarrow 0} \left(\frac{5}{x \cos^2 x} \right) \\
 &= \lim_{x \rightarrow 0} \left(\frac{5}{x \left(\frac{\cos^2 x}{\sin^2 x} \right)} \right) \\
 &= \lim_{x \rightarrow 0} \left(\frac{5 \sin^2 x}{x \cos^2 x} \right) \\
 &= \lim_{x \rightarrow 0} \left(\frac{5 \sin x \sin x}{x \cos x \cos x} \right) \\
 &= \lim_{x \rightarrow 0} \left(\frac{\sin x \cdot 5 \cdot \sin x}{x \cdot \cos x \cdot \cos x} \right)
 \end{aligned}$$

$$\begin{aligned}
 & \left(\lim_{x \rightarrow 0} \frac{\sin x}{x} \right) \left(\lim_{x \rightarrow 0} \frac{5 \sin x}{\cos^2 x} \right) \\
 &= (1) \left(\frac{5 \sin 0}{\cos^2 0} \right) \\
 &= 1(0) \\
 &= \textcircled{0}
 \end{aligned}$$

$$\begin{aligned}
 18. \quad & \lim_{x \rightarrow 0} \frac{5(e^{2x}-1)}{e^x-1} \\
 &= 5 \lim_{x \rightarrow 0} \frac{(e^x+1)\cancel{(e^x-1)}}{\cancel{e^x-1}} \\
 &= 5 \lim_{x \rightarrow 0} e^x + 1 \\
 &= 5(e^0 + 1) \\
 &= 5(1+1) \\
 &= 5(2) \\
 &= \textcircled{10}
 \end{aligned}$$

$$\begin{aligned}
 & e^{2x} - 1 \\
 & (e^x)^2 - (1)^2 \\
 & (e^x + 1)(e^x - 1)
 \end{aligned}$$