2.3 problem made up by me:

101. $\lim_{x\to 0} \dfrac{\dfrac{4}{x-5}+\dfrac{4}{5}}{x}$

3.1 problems made up by me:

Instructions for all problems: find the slope of the tangent line to the given function at the given value of x by using limits and some version of the slope formula:

101. $f(x)=2x^2 \quad x=-1$

102. $f(x)=x^3 \quad x=2$

103. $f(x)=\dfrac{1}{x} \quad x=-3$

104. $f(x)=\dfrac{3}{x} \quad x=5$