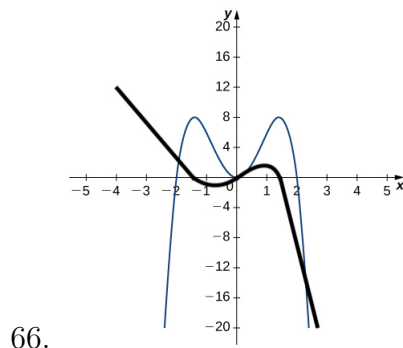
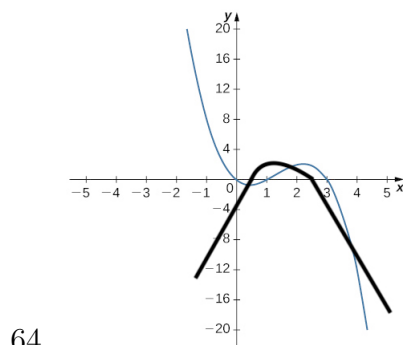


Problem 1. Section 3.2 #56-60*Use the definition of a derivative...*

56. $\boxed{2/7}$

58. $\boxed{5-2x}$

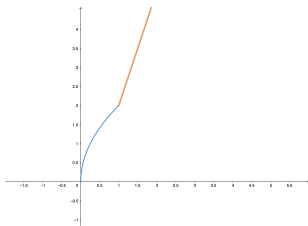
60. $\boxed{1_{2\sqrt{x-6}}}$

Problem 2. Section 3.2 #64-66*tangent slope and tangent line***Problem 3. Section 3.2 #68-70***Find $f(x)$ and a*

68. $\boxed{f(x) = x^{2/3}} \quad \boxed{a = 1}$

70. $\boxed{f(x) = \cos x} \quad \boxed{x = \pi}$

Problem 4. Section 3.2 #74*sketch the graph...*



a.

b. $\lim_{x \rightarrow 1^-} = 1/2 \neq \lim_{x \rightarrow 1^+} = 3$

Problem 5. Section 3.2 #78*determine for which...*

a. $x = 4$

b. None

Problem 6. Section 3.2 #90*describe what the two expressions...*a. the average rate of change of population over year x to year $x + h$ b. the instantaneous rate of change of population at year x