MATH 30, 4/6/2020: CORONA QUIZ 6

Consider the "4th root" function $f(x) = x^{1/4}$ (also written $\sqrt[4]{x}$).

(a) Find the equation of the tangent line at the point $a = 16$.

(b) Approximate $(17)^{1/4}$ using part (a).

(c) Make a rough sketch illustrating parts (a) and (b).

(d) Use a calculator to find the decimal expansion of $(17)^{1/4}$. Was part (b) a good approximation?