Limits & Continuity
1.1A – Limits by Tables

A: Complete the tables and use them to find the given limit. Round to 3 decimal places when appropriate.

#1) $\lim\limits_{x\to 3}\dfrac{6x-7}{x-3}$

x	2.9	2.99	2.999	3	3.001	3.01	3.1
y							

#2) $\lim\limits_{x\to 1}\dfrac{x^3-1}{x-1}$

x	0.9	0.99	0.999	1	1.001	1.01	1.1
y							

#3) $\lim\limits_{x\to 0}\dfrac{4x+2}{x}$

x	-0.1	-0.01	-0.001	0	0.001	0.01	0.1
y							

#4) $\lim\limits_{x\to 2}\dfrac{x^3-8}{x-2}$

x	1.9	1.99	1.999	2	2.001	2.01	2.1
y							

B: Find each limit by tables. Round to 3 decimal places when appropriate.

#5) $\lim\limits_{x\to 0}(3x+1)^{\frac{1}{x}}$

#6) $\lim\limits_{x\to 3}\dfrac{\frac{1}{x}-\frac{1}{3}}{x-3}$

#7) $\lim\limits_{x\to 0}(2-x)^{\frac{1}{x}}$

#8) $\lim\limits_{x\to 2}\dfrac{\sqrt{x}-2}{x-2}$