1a.

x	Δx	$\Delta y/\Delta x$
-0.75	0.5	-0.59
-0.75	0.25	-0.41
-0.75	-0.25	0.16
-0.75	-0.5	0.53

1b. $Given\ f(x) = 0.5^3 - x,\ and\ x = -0.75,\ \Delta y/\Delta x = -0.16$.

1c. If $\Delta x = 0.01\ then\ \Delta y/\Delta x = -0.17$.

2a.

x	Δx	$\Delta y/\Delta x$
0	0.5	-0.88
0	0.25	-0.97
0	-0.25	-0.97
0	-0.5	-0.88

2b. $Given\ f(x) = 0.5^3 - x,\ and\ x = 0,\ \Delta y/\Delta x = -1.00$.

2c. Anything within approximately .1 units seems to work.

3a.

x	Δx	$\Delta y/\Delta x$
.75	0.5	0.53
.75	0.25	0.16
.75	-0.25	-0.41
.75	-0.5	-0.59

3b. $Given\ f(x) = 0.5^3 - x,\ and\ x = 0,\ \Delta y/\Delta x = -0.16$.

3c. Anything within one unit seems to work.

4a. My answer for part c was not the same for every x value. Some parts of a the function had greater rates of changes than other parts so the range of change intervals tangent line which were within one interval of each other was different.

4b. A small Δx will be needed whenever a functions slope is changing moment by moment, or else the actual differential will be different.