The Seven Deadly Sins of Math 2374

As you are all enrolled in Multivariable Calculus, there are certain mistakes that I expect to NEVER see from you. They are outlined below. If you make one of these mistakes I reserve the right to take off ALL points on that particular problem.

(1) Not reading directions.

(2) \((a + b)^2 = a^2 + b^2\)
   (This is affectionally known as “Freshman’s Dream”. I call it “TA’s nightmare”)

(3) \(\sqrt{a + b} = \sqrt{a} + \sqrt{b}\)

(4) \(\sin(x + y) = \sin(x) + \sin(y)\)

(5) \(\sin(ax) = a \sin(x)\)
   (here sin may be substituted with any trigonometric function)

(6) \(\frac{1}{x + y} = \frac{1}{x} + \frac{1}{y}\)

(7) \(\frac{(ax + b)(cx + d) + x^2}{ax + b} = (cx + d) + x^2\)