

Show all work and circle/box your final answer. All answers must be simplified unless stated otherwise.

1. (4 points) Find the domain of $f(x) = \frac{1}{\sqrt{2x+6}}$

2. (6 points) If $f(x) = x^2$ and $h \neq 0$, find $\frac{f(x+h) - f(x)}{h}$