5. [6 points] Let g be the function defined by

$$g(x) = \frac{10(x-1)(x-2)}{(2x+1)(x^2+2x-1)}.$$

Find all zeros, y-intercepts, and horizontal and vertical asymptotes of the graph of y = g(x). If appropriate, write "NONE" in the answer blank provided. (Show your work and write your answers in exact form.)

zero(s): _____

y-intercept(s): _____

horizontal asymptote(s): _____

vertical asymptote(s): _____

6. [5 points] Find all solutions to the equation $5\sin(2t) = -\pi$ for $0 \le t \le \pi$. (Show your work clearly and give your final answer(s) in exact form.)

Answer(s):