

You are not to use a calculator for this part of the exam.

1. Answer each of the following using the function  $f(x) = \frac{2x^2 - 8}{x^2 + 2x + 1} = \frac{2(x+2)(x-2)}{(x+1)^2}$ .

*2 points each*

- (a) Give all  $x$ -intercepts: \_\_\_\_\_
- (b) Give all  $y$ -intercepts: \_\_\_\_\_
- (c) Give *the equations* of all vertical asymptotes: \_\_\_\_\_
- (d) Give *the equations* of all horizontal asymptotes: \_\_\_\_\_

There's another on the back.

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