

NAME: \_\_\_\_\_ Score \_\_\_\_\_/10  
Please **print** your name

**All calculations are to be exact. NO DECIMALS.  
If you use a formula, write the formula before using it.**

1. Analyze the function whose rule is  $f(x) = x^2 - 5x - 14$ . Your analysis should answer each of the following questions.

a) What kind of function is  $f$  and what does that tell you about the graph?

b) How do you find the  $x$ -intercepts?

c) What are the  $x$ -intercepts?

d) What is the vertex?

e) Sketch the graph.