Homework

Directions: Use the following scenario to complete Problems 1–5.

Julie is about to ride down a waterslide at a local waterpark. Julie's path can be modeled by the equation $y = {}^{-}16x^2 + 64$, where x is the time on the slide measured in minutes and y is the height of the slide measured in feet.

1. How high above the ground is the waterslide?

A. 16 feet   B. 2 feet   C. 64 feet   D. 100 feet

2. How long is Julie on the waterslide?

A. 1 minute   B. 2 minutes   C. 3 minutes   D. 4 minutes

3. What is Julie's height after 1 minute?

A. 64 feet   B. 60 feet   C. 48 feet   D. 28 feet

4. What is Julie's height after 30 seconds?

A. 64 feet   B. 60 feet   C. 48 feet   D. 28 feet

5. What is Julie's height after 2 minutes?

A. 64 feet   B. 60 feet   C. 48 feet   D. 0 feet

Homework

Directions: Complete the five steps of the SOLVE process for the problem below.

A rocket is launched vertically off of a cliff. Its path is given by the equation $y = {}^-16t^2 + 64t + 80$, where t is the time in seconds and y is the height in feet. What is the maximum height reached by the rocket?

6. S – Underline the question.
This problem is asking me to find _____.

7. O - Identify the facts.
Eliminate the unnecessary facts.
List the necessary facts.

8. L – Choose an operation or operations.
Write in words what your plan of action will be.

9. V – Estimate your answer.
Carry out your plan.

10. E - Does your answer make sense? (Compare your answer to the question.)

Is your answer reasonable? (Compare your answer to the estimate.)

Is your answer accurate? (Check your work.)

Write your answer in a complete sentence.