

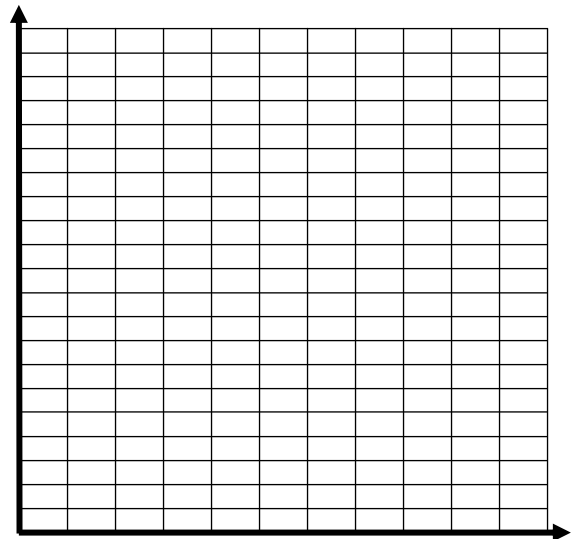
Engineer Erik has launched a model rocket from the Earth with an upward speed of 160 feet per second. The path of the rocket can be modeled by the following equation:

$$h = -16t^2 + 160t .$$

1. Complete the table.

Time (in sec.)	Process	Height (in ft.)

2. Graph the path of the rocket.



3. What is a reasonable domain for this graph? _____

4. What is a reasonable range for this graph? _____

5. What is the height of the rocket at 2 seconds? _____

6. How long will it take the rocket to reach 384 feet in height? _____

7. At how many seconds will it be 336 feet in height? _____

8. How long will it take to reach maximum height? _____

9. What is the maximum height? _____

10. Will the rocket go higher than 500 feet? Why or why not?