

Name: _____

Date: _____

Problem-Based Task: Is the Glider Safe?

Shin is a beginner hang glider. He's practicing jumping from a certain height, dipping initially, and then rising. Shin should dip to a height no lower than 6 feet above the ground, which is considered a safe height, before changing direction and beginning to rise. The position of Shin's hang glider is given by $y = (x - 4)(x - 6)$, with x representing the time in seconds since Shin starts the initial jump and y representing the distance in feet from the safe height. Will Shin stay above the safe height? How long will it take for Shin to reach the initial height of the jump?

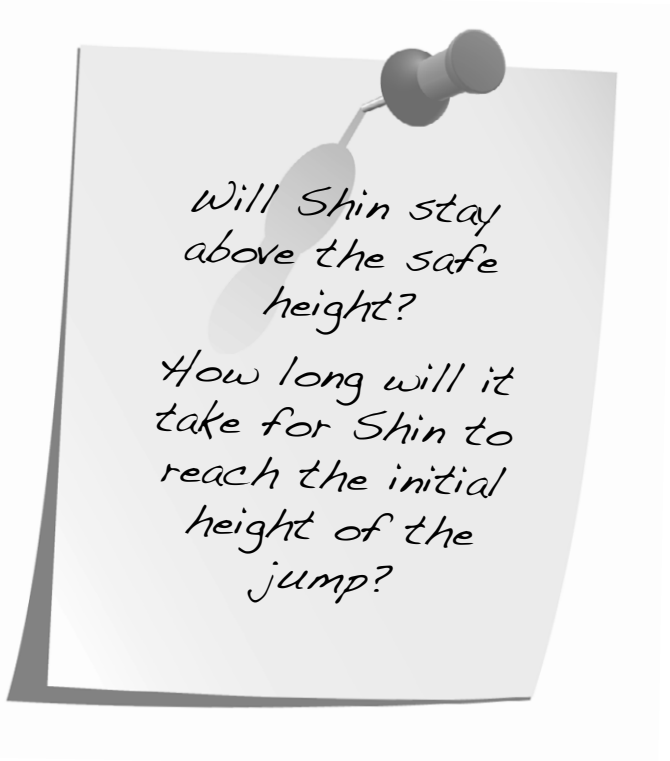
SMP

1 ✓ 2

3 ✓ 4 ✓

5 6

7 8



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above the safe
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*How long will it
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