

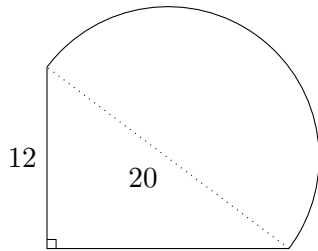
Math 123  
Spring 2023  
Dr. Lily Yen

# Quiz 3

Show all your work

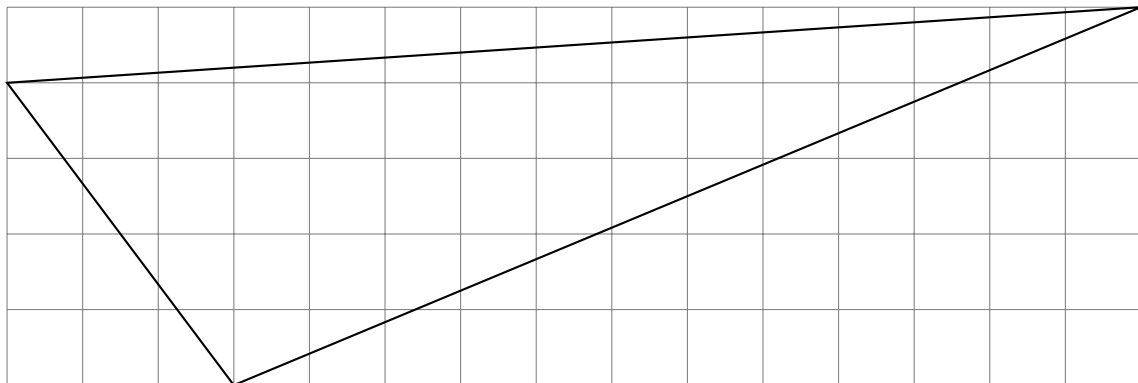
Name: \_\_\_\_\_  
Number: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Score: \_\_\_/11

**Problem 1:** Find the combined area of a right triangle with a semicircle drawn on its hypotenuse. If necessary, round to nearest thousandths.



**Problem 2:** Below is a  $5 \times 15$  grid containing a big triangle. Find the perimeter of the big triangle. Show your work for each side length.

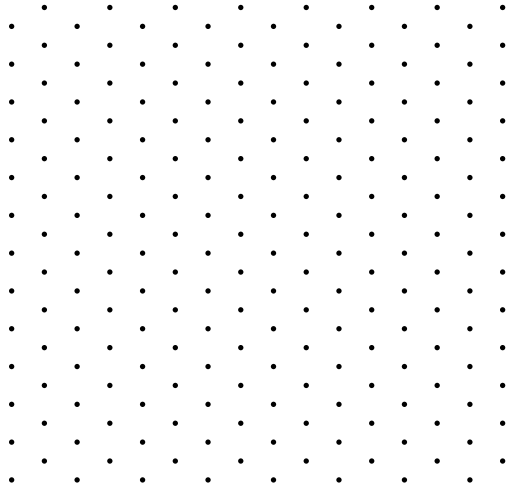
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Score: /2

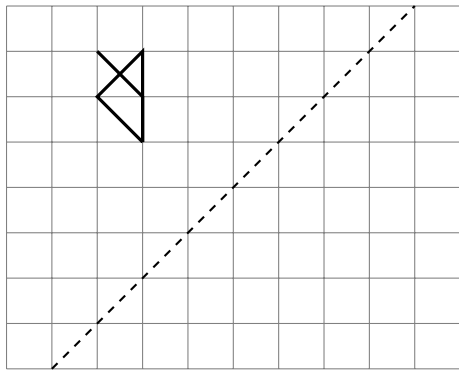
**Problem 3:** In the three dimensional guide below, draw a tall rectangular prism (a box) with base area 12 square units.

- Indicate the height of the rectangular prism on the 3-D grid.
- Drill a cylindrical hole of diameter 1 from the top to the bottom of the tall rectangular prism. Find the volume of the resulting solid.



Score: /4

**Problem 4:** Reflect the given figure along the dashed line.



Score: /2