

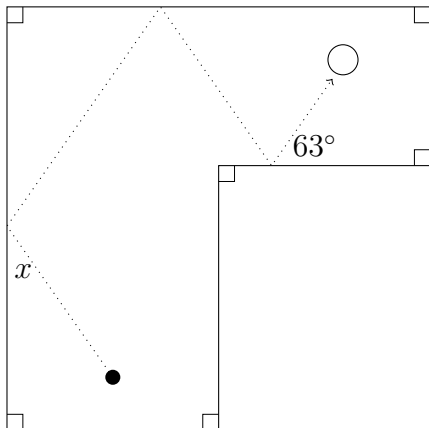
Assignment 3

Show all your work

Name: _____
 Number: _____
 Signature: _____
 Score: ____/20

Problem 1: Find the measure of angle x to make a hole-in-one at the miniature golf course hole. Use the following two facts to find x :

- The angle the ball makes as it hits a flat surface has the same measure as the angle the ball makes as it leaves the same surface.
- The interior angle sum of a triangle is 180° .

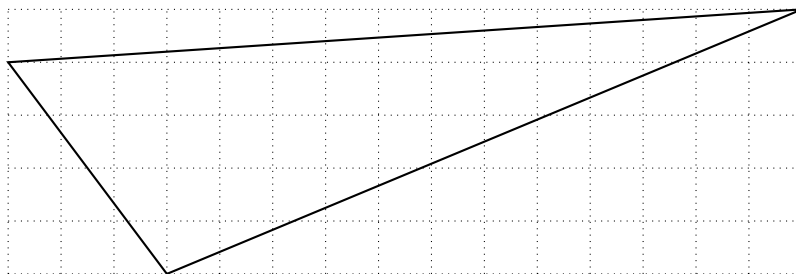


Score: ____/3

Problem 2: Set up a table for convex polygons' angle sums beginning with a triangle, followed by a quadrilateral, a pentagon, and so on. From your table, derive a formula for the measure of the interior angle sum in a regular n -sided polygon.

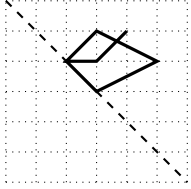
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Problem 3: Below is a 5×15 grid containing a big triangle. Find the area and perimeter of the big triangle. Show your work.



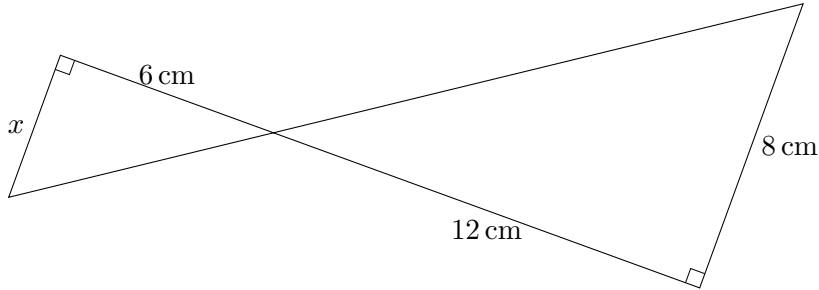
Score: ____/4

Problem 4: Draw a reflection of the given figure along the given line.



Score: /2

Problem 5: Find $x =$. Name the triangles and provide reasons for your claim.



Score: /3

Problem 6: Draw a square-based rectangular prism of height 3π cm and a volume of 12π cm³. Suppose that a right cylinder of height 3 cm also have the same volume as the rectangular prism. Which solid has a bigger surface area? Show all steps.

Score: /5