

EXAM 3
Math 152
December 5, 2008

Name _____

You must show all your work. Partial credit will be given.

1. Convert each of the following quantities. 24 in. = _____ ft.

230 mm = _____ dm

7 yds = _____ ft

610 dam² = _____ hm²

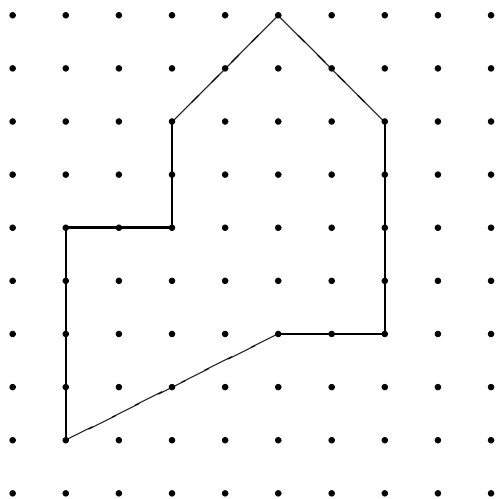
5 L = _____ cL

1 m³ = _____ cm³

2 ft² = _____ in²

2. A rectangular container measuring 24 inches by 18 inches by 9 inches is filled with water. How much does the water weigh? (1 gallon is 231 cubic inches and each gallon weighs 8.3 pounds)

3. Assume the grid is spaced one unit apart in each row and column. Find the area of the following figure.



4. Glaciers in coastal Greenland are relatively fast moving and have been observed to flow at a rate of 20 m per day. How long will it take for such a glacier to move one kilometer?

5. A ladder is leaning against a building. If the ladder reaches 20 feet high on the building and the base of the ladder is 15 feet away from the bottom of the building, how long is the ladder?

6. Find the area of an equilateral triangle whose sides all have length 6 units.

7. Find the area of the area contained between the four circles in the picture below

