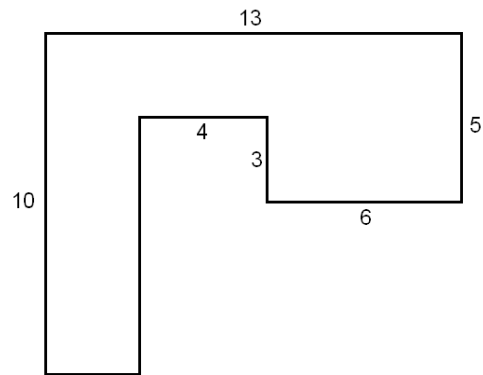


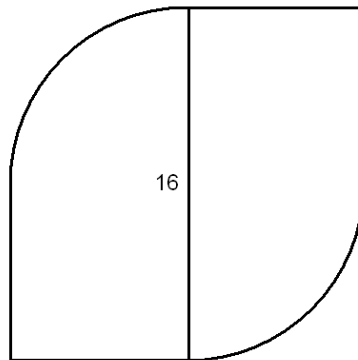
How Much Paint? A First Look at Area

January 24, 2011

1. What is the area of the following shape (all angles are right angles)?

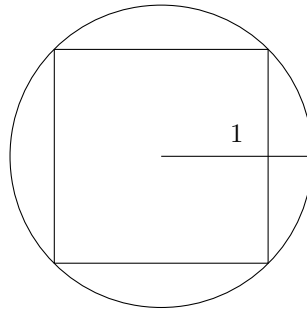


2. Find the area of the shape below. The upper left and lower right are circular arcs of a circle with diameter 16, and the upper right and lower left are straight lines meeting a right angles.



3. A cow is tied to the corner of a (rectangular) barn of dimensions 30 feet by 60 feet. If the rope is 90 feet long, how much grazing area does the cow have? (Draw a picture!)

4. What is the area of a square inscribed in a circle of radius 1?



5. (a) How many squares of side length s fit in a square of side length $2s$?
- (b) How many squares of side length s fit in a square of side length $3s$?
- (c) How many squares of side length s fit in a square of side length $4s$?
- (d) How many squares of side length s fit in a square of side length ks , where k is an unspecified whole number?