

NAME: \_\_\_\_\_

1. 010012a

If the circumference of a circle is  $10\pi$  inches, what is the area, in square inches, of the circle?

- [A]  $25\pi$                       [B]  $100\pi$   
[C]  $10\pi$                       [D]  $50\pi$

2. 010831a

The circumference of a circle measures  $22\pi$  units. Find the number of square units in the area of the circle. Express your answer in terms of  $\pi$ .

3. 010717a

A circular garden has a diameter of 12 feet. How many bags of topsoil must Linda buy to cover the garden if one bag covers an area of 3 square feet?

- [A] 40      [B] 13      [C] 38      [D] 151

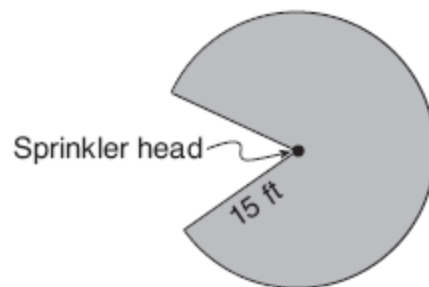
4. 010617a

A dog is tied with a rope to a stake in the ground. The length of the rope is 5 yards. What is the area, in square yards, in which the dog can roam?

- [A] 25      [B] 20      [C]  $10\pi$       [D]  $25\pi$

5. 060716b

Cerise waters her lawn with a sprinkler that sprays water in a circular pattern at a distance of 15 feet from the sprinkler. The sprinkler head rotates through an angle of  $300^\circ$ , as shown by the shaded area in the accompanying diagram.



What is the area of the lawn, to the *nearest square foot*, that receives water from this sprinkler?

- [A] 79      [B] 707      [C] 589      [D] 94

6. 060106b

The circumference of a circular plot of land is increased by 10%. What is the best estimate of the total percentage that the area of the plot increased?

- [A] 25%      [B] 31%      [C] 10%      [D] 21%

[1] A \_\_\_\_\_

[2]  $121\pi$ , and appropriate work is shown.

[1] Appropriate work is shown, but one computational error is made.

or [1] Appropriate work is shown, but one conceptual error is made.

or [1] Appropriate work is shown, but the answer is expressed as a decimal.

or [1] The radius of the circle is found, but no further correct work is shown.

or [1]  $121\pi$ , but no work is shown.

[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously

[2] incorrect procedure. \_\_\_\_\_

[3] C \_\_\_\_\_

[4] D \_\_\_\_\_

[5] C \_\_\_\_\_

[6] D \_\_\_\_\_