ACS MLP

Subject: Mathematics 5 (MA33102) **Grade** 12 SM/EM **Instructor:** Ms. Chompoonooch

Name_____**class**_____ **No.**_____

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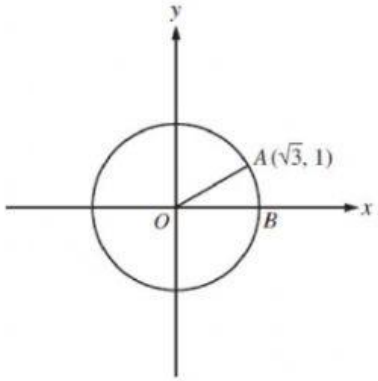

In the xy-plane above, O is the center of the circle, and the measure of $\angle AOB$ is $\frac{\pi}{a}$ radians. What is the value of a ?

1

A musician has a new song available for downloading or streaming. The musician earns \$0.09 each time the song is downloaded and \$0.002 each time the song is streamed. Which of the following expressions represents the amount, in dollars, that the musician earns if the song is downloaded d times and streamed s times?

A) $0.002d + 0.09s$

B) $0.002d - 0.09s$

C) $0.09d + 0.002s$

D) $0.09d - 0.002s$

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$$ax + by = 12$$
$$2x + 8y = 60$$

In the system of equations above, a and b are constants. If the system has infinitely many solutions, what is the value of $\frac{a}{b}$?

2

A quality control manager at a factory selects 7 lightbulbs at random for inspection out of every 400 lightbulbs produced. At this rate, how many lightbulbs will be inspected if the factory produces 20,000 lightbulbs?

A) 300

B) 350

C) 400

D) 450

3

$$\ell = 24 + 3.5m$$

One end of a spring is attached to a ceiling. When an object of mass m kilograms is attached to the other end of the spring, the spring stretches to a length of ℓ centimeters as shown in the equation above. What is m when ℓ is 73 ?

A) 14

B) 27.7

C) 73

D) 279.5

LIVEWORKSHEETS