Name_____SAT MATH REVIEW PART 1 3-23-19

THIS IS a NO CALCULATOR portion of the EXAM, you have NINE MINUTES to complete

QUESTION 1

If $2x - 3y = 9$ and $y = 3$, then what is the value of x?

A) 0

B) 3

C) 6

D) 9

QUESTION 2

$x - y = -4$

$x - 2y = -6$

Which of the following ordered pairs (x, y) satisfies the system of equations above?

A) $(-2, 2)$

B) $(-2, 4)$

C) $(4, 8)$

D) $(4, -8)$

QUESTION 3

An information technology company estimates the cost of a project, in dollars, using the expression $240 + 3nt$, where n is the number of computer servers working on the project and t is the total time, in hours, the project will take using n servers. Which of the following is the best interpretation of the number 3 in the expression?

A) Each server costs the company $3 per hour to run.

B) A minimum of 3 servers will work on the project.

C) The price of the project increases by $3 every hour.

D) Each server can work 3 hours per day.

QUESTION 4

If $\frac{5}{8}x = -\frac{1}{16}$, what is the value of x?

A) $-\frac{11}{16}$

B) $-\frac{1}{10}$

C) $-\frac{5}{128}$

D) $\frac{9}{16}$

QUESTION 5

In triangle ABC, angle C has a measure of 90°. If $\sin A = 0.6$, what is the value of $\cos B$?

A) 0.3

B) 0.4

C) 0.6

D) 0.8

QUESTION 6

If h and k are functions such that $h(x) = x + 3$ and $h(g(2)) = 9$, which of the following could describe $g(x)$?

A) $x^2 + 2$

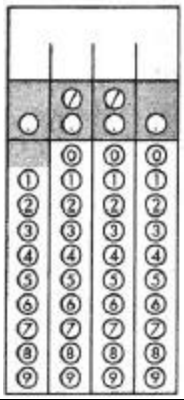
B) $x^2 + 3$

C) $x^2 + 4$

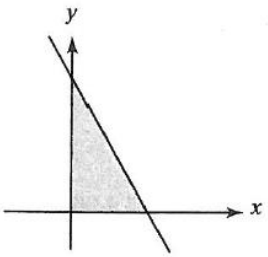
D) $x^2 + 5$

QUESTION 7

At a restaurant, each large order of fries has 350 more calories than one large soda. If 2 large orders of fries and 3 large sodas have a total of 1,500 calories, how many calories does one large order of fries have?



QUESTION 8



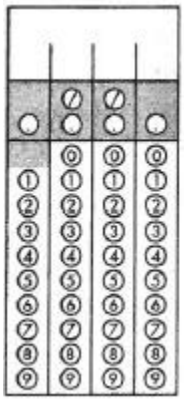
Note: Figure not drawn to scale.

$x \geq 0$

$y \geq 0$

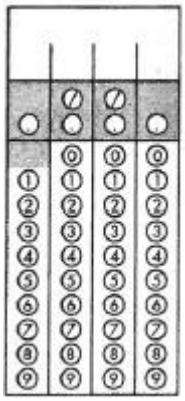
$3x + y \leq k$

In the figure above, the shaded region represents the solution set for the system of inequalities shown. If the area of this shaded region is 24 square units, what is the value of k?

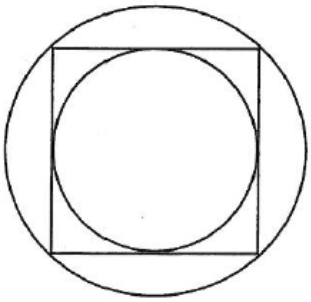


QUESTION 9

If $a = 4\sqrt{2}$ and $2a = \sqrt{2b}$, what is the value of b?



QUESTION 10



In the figure above, a circle is inscribed in a square that is inscribed in a larger circle. If the area of the larger circle is 16.5 square units, what is the area of the smaller circle?