ACS MLP

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

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

13

What is the sum of all values of m that satisfy $2m^2 - 16m + 8 = 0$?

A) -8

B) $-4\sqrt{3}$

C) $4\sqrt{3}$

D) 8

14

A radioactive substance decays at an annual rate of 13 percent. If the initial amount of the substance is 325 grams, which of the following functions f models the remaining amount of the substance, in grams, t years later?

A) $f(t) = 325(0.87)^t$

B) $f(t) = 325(0.13)^t$

C) $f(t) = 0.87(325)^t$

D) $f(t) = 0.13(325)^t$

15

The expression $\frac{5x-2}{x+3}$ is equivalent to which of the following?

A) $\frac{5-2}{3}$

B) $5-\frac{2}{3}$

C) $5-\frac{2}{x+3}$

D) $5-\frac{17}{x+3}$

16

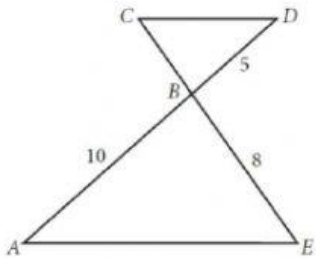
The sales manager of a company awarded a total of \$3000 in bonuses to the most productive salespeople. The bonuses were awarded in amounts of \$250 or \$750. If at least one \$250 bonus and at least one \$750 bonus were awarded, what is one possible number of \$250 bonuses awarded?

17

$$2x(3x+5) + 3(3x+5) = ax^2 + bx + c$$

In the equation above, a, b, and c are constants. If the equation is true for all values of x, what is the value of b ?

18



In the figure above, $\overline{AE} \parallel \overline{CD}$ and segment AD intersects segment CE at B. What is the length of segment CE ?