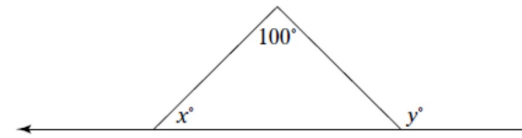**1.** If the height of an equilateral triangle is 9, what is its area?

(F) 27

(G) 54

(H) 81

(J) $27\sqrt{3}$

(K) $54\sqrt{3}$

2. In the following figure, what is the value of y in terms of x?

(A) $x + 80$

(B) $80 - x$

(C) $x + 100$

(D) $x - 100$

(E) $100 - x$

3. If $3x + 5y = 4$, which of the following is equivalent to the expression $(6x + 10y)(100x + 100y)$?

(A) $100x + 100y$

(B) $200x + 200y$

(C) $400x + 400y$

(D) $800x + 800y$

(E) $1{,}600x + 1{,}600y$

4. What is the formula of a line that is perpendicular to $y = \frac{1}{3}x + 9$ and includes the point $(3, 4)$?

(A) $y = \frac{1}{3}x + 5$

(B) $y = -\frac{1}{3}x + 13$

(C) $y = 3x + 5$

(D) $y = -3x + 5$

(E) $y = -3x + 13$

Answers:
1. J
2. C
3. D
4. E