1. Which of the following is the slope of a line that is perpendicular to the line $3x + 5y = 20$?

(A) $-3/5$

(B) $3/5$

(C) $5/3$

(D) None of the above.

2. Which of the following is equal to $\log_5\left(\dfrac{1}{25}\right)$?

(A) -2

(B) $1/2$

(C) $-1/2$

(D) None of the above.

3. Which of the following is equal to $8^{3\log_8(2)}$?

(A) 1

(B) 6

(C) 8

(D) None of the above.

4.   True or False?

$\ln(x + y) = \ln(x) \ln(y)$ for all $x, y > 0$.
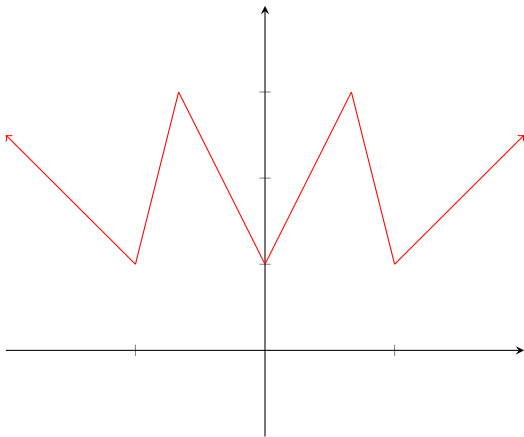
5. True or False?

$5^{x+y} = 5^x 5^y$ for all real numbers x, y.

6. True or False?

$e^{\ln(x)-\ln(y)} = \dfrac{x}{y}$ for all $x, y > 0$.

7.   True or False?

The following is the graph of an even function.

8.   True or False?

The function $g(x) = \cos(x)$ is odd.

9. Which of the following is equal to $\sin\left(\theta + \dfrac{\pi}{2}\right)$?

(A) $\cos(\theta)$

(B) $\sin(\theta)$

(C) $-\sin(\theta)$

(D) None of the above.