Name

Logarithms - Product Property - Product to Sum (Variables)

1 Convert the given logarithm to its equivalent based on the product property

$$\log_x(p \cdot w)$$

A	$p \cdot \log_x w$	B	$\log_x p + \log_x w$
C	$\log_w x + \log_x p$		

2 Convert the given logarithm to its equivalent based on the product property

$$\log_p(n \cdot m)$$

A	$n \cdot \log_p m$	B	$\log_m p + \log_p n$
C	$\log_p n + \log_p m$		

3 Convert the given logarithm to its equivalent based on the product property

$$\log_m(p \cdot n)$$

A	$\log_n m + \log_m p$	B	$p \cdot \log_m n$
C	$\log_m p + \log_m n$		

4 Convert the given logarithm to its equivalent based on the product property

$$\log_m(p \cdot q)$$

A	$p \cdot \log_m q$	B	$\log_m p + \log_m q$
C	$\log_q m + \log_m p$		

5 Convert the given logarithm to its equivalent based on the product property

$$\log_x(y \cdot z)$$

A	$\log_x y + \log_x z$	B	$y \cdot \log_x z$
C	$\log_z x + \log_x y$		

6 Convert the given logarithm to its equivalent based on the product property

$$\log_x(q \cdot z)$$

A	$\log_x q + \log_x z$	B	$q \cdot \log_x z$
C	$\log_z x + \log_x q$		

7 Convert the given logarithm to its equivalent based on the product property

$$\log_z(m \cdot t)$$

A	$\log_z m + \log_z t$	B	$m \cdot \log_z t$
C	$\log_t z + \log_z m$		

8 Convert the given logarithm to its equivalent based on the product property

$$\log_r(y \cdot n)$$

A	$\log_r y + \log_r n$	B	$\log_n r + \log_r y$
C	$y \cdot \log_r n$		