Logarithms - Quotient Property - Division as Fraction To Difference (Integers)

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

$$\log_7 \frac{8}{10}$$

A	B
$\log_7 8 - \log_7 10$	$\log_8 7 - \log_8 10$
C	**D**
$\log_7 10 - \log_7 8$	$\log_8 10 - \log_8 7$

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

$$\log_8 \frac{9}{4}$$

A	B
$\log_8 9 - \log_8 4$	$\log_8 4 - \log_8 9$
C	**D**
$\log_9 8 - \log_9 4$	$\log_9 4 - \log_9 8$

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

$$\log_5 \frac{3}{7}$$

A	B
$\log_7 3 - \log_7 7$	$\log_3 3 - \log_3 7$
C	**D**
$\log_3 5 - \log_3 7$	$\log_5 3 - \log_5 7$

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

$$\log_8 \frac{2}{5}$$

A	B
$\log_5 2 - \log_5 5$	$\log_8 2 - \log_8 5$
C	**D**
$\log_8 5 - \log_8 2$	$\log_9 2 - \log_9 5$
E	
$\log_2 5 - \log_2 8$	

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

$$\log_8 \frac{3}{10}$$

A	B
$\log_8 3 - \log_8 10$	$\log_3 10 - \log_3 8$
C	**D**
$\log_3 8 - \log_3 10$	$\log_{10} 3 - \log_{10} 10$

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

$$\log_{10} \frac{5}{2}$$

A	B
$\log_7 5 - \log_7 2$	$\log_{10} 5 - \log_{10} 2$
C	**D**
$\log_{12} 5 - \log_{12} 2$	$\log_9 5 - \log_9 2$

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

$$\log_5 \frac{3}{10}$$

A	B
$\log_7 3 - \log_7 10$	$\log_6 3 - \log_6 10$
C	**D**
$\log_3 5 - \log_3 10$	$\log_5 3 - \log_5 10$

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

$$\log_9 \frac{7}{2}$$

A	B
$\log_9 7 - \log_9 2$	$\log_9 2 - \log_9 7$
C	**D**
$\log_6 7 - \log_6 2$	$\log_7 9 - \log_7 2$