



## Logarithms - Change of Base - Fraction to Single (Integers)

1 Convert the given logarithm fraction to its simplified form with a change of base

$$\frac{\log_{10} 13}{\log_{10} 2}$$

A  $\log_2 13$  B  $\log_2 11$  C  $\log_2 14$

D

2 Convert the given logarithm fraction to its simplified form with a change of base

$$\frac{\log_9 8}{\log_9 2}$$

A  $\log_4 8$  B  $\log_2 7$  C  $\log_2 9$

D  $\log_2 8$

3 Convert the given logarithm fraction to its simplified form with a change of base

$$\frac{\log_4 5}{\log_4 6}$$

A  $\log_4 5$  B  $\log_6 5$  C  $\log_6 6$

D  $\log_8 5$

4 Convert the given logarithm fraction to its simplified form with a change of base

$$\frac{\log_7 10}{\log_7 3}$$

A  $\log_3 11$  B  $\log_{10} 3$  C  $\log_3 10$

D

5 Convert the given logarithm fraction to its simplified form with a change of base

$$\frac{\log_7 12}{\log_7 2}$$

A  $\log_2 14$  B  $\log_{12} 2$  C  $\log_2 12$

D  $\log_2 11$

6 Convert the given logarithm fraction to its simplified form with a change of base

$$\frac{\log_7 14}{\log_7 8}$$

A  $\log_8 14$  B  $\log_{14} 8$  C  $\log_9 14$

D  $\log_8 13$

7 Convert the given logarithm fraction to its simplified form with a change of base

$$\frac{\log_7 6}{\log_7 5}$$

A  $\log_5 6$  B  $\log_6 5$  C  $\log_5 8$

D  $\log_5 4$

8 Convert the given logarithm fraction to its simplified form with a change of base

$$\frac{\log_6 10}{\log_6 4}$$

A  $\log_{10} 4$  B  $\log_4 8$  C  $\log_4 10$

D  $\log_4 11$