



Logarithms - Quotient Property - To Difference

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

$$\log_3 0.22$$

- | | |
|-------------------------|-------------------------|
| A $\log_2 3 - \log_2 9$ | B $\log_3 9 - \log_3 2$ |
| C $\log_1 2 - \log_1 9$ | D $\log_3 2 - \log_3 9$ |

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

$$\log_2 1.13$$

- | | |
|-------------------------|-------------------------|
| A $\log_2 9 - \log_2 8$ | B $\log_2 8 - \log_2 9$ |
| C $\log_9 8 - \log_9 2$ | D $\log_9 2 - \log_9 8$ |

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

$$\log_6 1.13$$

- | | |
|-------------------------|-------------------------|
| A $\log_7 9 - \log_7 8$ | B $\log_9 6 - \log_9 8$ |
| C $\log_6 9 - \log_6 8$ | D $\log_4 9 - \log_4 8$ |

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

$$\log_{10} 0.4$$

- | | |
|-------------------------------|-------------------------------|
| A $\log_2 10 - \log_2 5$ | B $\log_{11} 2 - \log_{11} 5$ |
| C $\log_{10} 5 - \log_{10} 2$ | D $\log_{10} 2 - \log_{10} 5$ |
| E $\log_9 2 - \log_9 5$ | |

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

$$\log_6 2.5$$

- | | |
|-------------------------|-------------------------|
| A $\log_6 5 - \log_6 2$ | B $\log_3 5 - \log_3 2$ |
| C $\log_5 5 - \log_5 2$ | D $\log_7 5 - \log_7 2$ |

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

$$\log_5 0.6$$

- | | |
|--------------------------|--------------------------|
| A $\log_5 6 - \log_5 10$ | B $\log_6 6 - \log_6 10$ |
| C $\log_2 6 - \log_2 10$ | D $\log_4 6 - \log_4 10$ |
| E $\log_6 5 - \log_6 10$ | |

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

$$\log_2 1.25$$

- | | |
|-------------------------|-------------------------|
| A $\log_2 5 - \log_2 4$ | B $\log_2 4 - \log_2 5$ |
| C $\log_1 5 - \log_1 4$ | D $\log_5 4 - \log_5 2$ |

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

$$\log_9 0.75$$

- | | |
|-------------------------|-------------------------|
| A $\log_9 3 - \log_9 4$ | B $\log_6 3 - \log_6 4$ |
| C $\log_3 4 - \log_3 9$ | D $\log_3 9 - \log_3 4$ |