



## Logarithms - Quotient Property - Difference to Division as Decimal

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

$$\log_6 10 - \log_6 9$$

- |   |               |   |                 |
|---|---------------|---|-----------------|
| A | $\log_6 1.11$ | B | $\log_{1.11} 6$ |
| C | $\log_7 1.11$ | D | $\log_6 3.11$   |

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

$$\log_9 5 - \log_9 3$$

- |   |                 |   |               |
|---|-----------------|---|---------------|
| A | $\log_{1.67} 9$ | B | $\log_9 1.67$ |
| C | $\log_9 -0.33$  | D | $\log_9 3.67$ |

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

$$\log_6 7 - \log_6 8$$

- |   |                 |   |                |
|---|-----------------|---|----------------|
| A | $\log_5 0.88$   | B | $\log_6 -1.13$ |
| C | $\log_4 0.88$   | D | $\log_6 0.88$  |
| E | $\log_{0.88} 6$ |   |                |

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

$$\log_6 2 - \log_6 9$$

- |   |                |   |               |
|---|----------------|---|---------------|
| A | $\log_6 -1.78$ | B | $\log_6 2.22$ |
| C | $\log_6 0.22$  | D | $\log_6 1.22$ |
| E | $\log_6 -0.78$ |   |               |

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

$$\log_9 7 - \log_9 10$$

- |   |                |   |               |
|---|----------------|---|---------------|
| A | $\log_9 -0.3$  | B | $\log_9 -1.3$ |
| C | $\log_{0.7} 9$ | D | $\log_9 0.7$  |

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

$$\log_5 9 - \log_5 7$$

- |   |                 |   |               |
|---|-----------------|---|---------------|
| A | $\log_5 1.29$   | B | $\log_5 3.29$ |
| C | $\log_{1.29} 5$ |   |               |

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

$$\log_8 7 - \log_8 4$$

- |   |               |   |                 |
|---|---------------|---|-----------------|
| A | $\log_8 3.75$ | B | $\log_6 1.75$   |
| C | $\log_8 1.75$ | D | $\log_{1.75} 8$ |

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

$$\log_5 6 - \log_5 7$$

- |   |                |   |               |
|---|----------------|---|---------------|
| A | $\log_5 -0.14$ | B | $\log_5 0.86$ |
| C | $\log_7 0.86$  | D | $\log_3 0.86$ |