



Logarithms - Convert Exponent to Logarithm - From Decimal

1 Convert the given exponent to the equivalent in logarithm form

$$9^{3.8} = 4,228$$

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|---|------------------------|---|------------------------|
| A | $\log_9 4,228 = 3.8$ | B | $\log_{3.8} 9 = 4,228$ |
| C | $\log_{4,228} 9 = 3.8$ | D | $\log_{3.8} 4,228 = 9$ |

2 Convert the given exponent to the equivalent in logarithm form

$$2^{3.1} = 9$$

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|---|------------------|---|------------------|
| A | $\log_9 3.1 = 2$ | B | $\log_2 9 = 3.1$ |
|---|------------------|---|------------------|

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|---|--------------------|---|--------------------|
| C | $\log_{3.1} 2 = 9$ | D | $\log_{3.1} 9 = 2$ |
|---|--------------------|---|--------------------|

3 Convert the given exponent to the equivalent in logarithm form

$$7^{3.1} = 417$$

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|---|----------------------|---|----------------------|
| A | $\log_{3.1} 7 = 417$ | B | $\log_7 417 = 3.1$ |
| C | $\log_{417} 7 = 3.1$ | D | $\log_{417} 3.1 = 7$ |

4 Convert the given exponent to the equivalent in logarithm form

$$9^{2.3} = 157$$

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|---|----------------------|---|----------------------|
| A | $\log_{2.3} 9 = 157$ | B | $\log_{2.3} 157 = 9$ |
| C | $\log_{157} 9 = 2.3$ | D | $\log_9 157 = 2.3$ |

5 Convert the given exponent to the equivalent in logarithm form

$$6^{2.8} = 151$$

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|---|----------------------|---|----------------------|
| A | $\log_{2.8} 6 = 151$ | B | $\log_{151} 6 = 2.8$ |
| C | $\log_{2.8} 151 = 6$ | D | $\log_6 151 = 2.8$ |

6 Convert the given exponent to the equivalent in logarithm form

$$6^{3.5} = 529$$

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|---|----------------------|---|----------------------|
| A | $\log_{3.5} 529 = 6$ | B | $\log_{3.5} 6 = 529$ |
| C | $\log_{529} 3.5 = 6$ | D | $\log_6 529 = 3.5$ |

7 Convert the given exponent to the equivalent in logarithm form

$$3^{4.1} = 90$$

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|---|---------------------|---|---------------------|
| A | $\log_{4.1} 3 = 90$ | B | $\log_{90} 4.1 = 3$ |
| C | $\log_{90} 3 = 4.1$ | D | $\log_{4.1} 90 = 3$ |
| E | $\log_3 90 = 4.1$ | | |

8 Convert the given exponent to the equivalent in logarithm form

$$3^{2.8} = 22$$

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|---|---------------------|---|---------------------|
| A | $\log_3 22 = 2.8$ | B | $\log_{22} 3 = 2.8$ |
| C | $\log_{22} 2.8 = 3$ | D | $\log_{2.8} 3 = 22$ |