



## Logarithms - Convert Exponent to Logarithm - Integer Base

**1** Convert the given exponent to the equivalent in logarithm form

$$10^2 = 100$$

- |                       |                       |
|-----------------------|-----------------------|
| A $\log_{100} 2 = 10$ | B $\log_{100} 10 = 2$ |
| C $\log_{10} 100 = 2$ | D $\log_2 10 = 100$   |
| E $\log_2 100 = 10$   |                       |

**2** Convert the given exponent to the equivalent in logarithm form

$$3^2 = 9$$

A  $\log_3 9 = 2$  B  $\log_2 3 = 9$

C  $\log_2 9 = 3$  D  $\log_9 2 = 3$

**3** Convert the given exponent to the equivalent in logarithm form

$$6^2 = 36$$

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|---------------------|---------------------|
| A $\log_{36} 6 = 2$ | B $\log_{36} 2 = 6$ |
| C $\log_6 36 = 2$   | D $\log_2 36 = 6$   |
| E $\log_2 6 = 36$   |                     |

**4** Convert the given exponent to the equivalent in logarithm form

$$8^2 = 64$$

A  $\log_{64} 2 = 8$  B  $\log_{64} 8 = 2$

C  $\log_2 64 = 8$  D  $\log_8 64 = 2$

**5** Convert the given exponent to the equivalent in logarithm form

$$3^3 = 27$$

- |                   |                     |
|-------------------|---------------------|
| A $\log_3 3 = 27$ | B $\log_{27} 3 = 3$ |
| C $\log_3 27 = 3$ |                     |

**6** Convert the given exponent to the equivalent in logarithm form

$$2^4 = 16$$

A  $\log_{16} 2 = 4$  B  $\log_4 16 = 2$

C  $\log_2 16 = 4$  D  $\log_{16} 4 = 2$

**7** Convert the given exponent to the equivalent in logarithm form

$$9^2 = 81$$

- |                     |                   |
|---------------------|-------------------|
| A $\log_{81} 9 = 2$ | B $\log_2 81 = 9$ |
| C $\log_9 81 = 2$   | D $\log_2 9 = 81$ |

**8** Convert the given exponent to the equivalent in logarithm form

$$5^3 = 125$$

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|----------------------|----------------------|
| A $\log_{125} 3 = 5$ | B $\log_{125} 5 = 3$ |
| C $\log_5 125 = 3$   |                      |