Name

# Logarithms - Convert Logarithm to Exponent - From Decimal

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

$$\log_5 77 = 2.7$$

| | | | |
|---|---|---|---|
| A | $2.7^5 = 77$ | B | $77^5 = 2.7$ |
| C | $5^{2.7} = 77$ | D | $77^{2.7} = 5$ |

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

$$\log_9 3,394 = 3.7$$

| | | | |
|---|---|---|---|
| A | $3.7^9 = 3,394$ | B | $3,394^9 = 3.7$ |
| C | $3,394^{3.7} = 9$ | D | $9^{3.7} = 3,394$ |

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

$$\log_7 1,339 = 3.7$$

| | | | |
|---|---|---|---|
| A | $1,339^{3.7} = 7$ | B | $7^{3.7} = 1,339$ |
| C | $3.7^{1,339} = 7$ | D | $1,339^7 = 3.7$ |

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

$$\log_9 585 = 2.9$$

| | | | |
|---|---|---|---|
| A | $585^9 = 2.9$ | B | $2.9^9 = 585$ |
| C | $585^{2.9} = 9$ | D | $2.9^{585} = 9$ |
| E | $9^{2.9} = 585$ | | |

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

$$\log_5 2,265 = 4.8$$

| | | | |
|---|---|---|---|
| A | $2,265^5 = 4.8$ | B | $4.8^5 = 2,265$ |
| C | $5^{4.8} = 2,265$ | D | $4.8^{2,265} = 5$ |

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

$$\log_7 343 = 3$$

| | | | |
|---|---|---|---|
| A | $7^3 = 343$ | B | $343^3 = 7$ |
| C | $343^7 = 3$ | D | $3^{343} = 7$ |
| E | $3^7 = 343$ | | |

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

$$\log_6 529 = 3.5$$

| | | | |
|---|---|---|---|
| A | $529^{3.5} = 6$ | B | $529^6 = 3.5$ |
| C | $6^{3.5} = 529$ | D | $3.5^6 = 529$ |

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

$$\log_8 147 = 2.4$$

| | | | |
|---|---|---|---|
| A | $2.4^8 = 147$ | B | $2.4^{147} = 8$ |
| C | $8^{2.4} = 147$ | D | $147^8 = 2.4$ |