

## Apply the product rule for exponents

**1**

Find the answer when these terms are multiplied

$$(r \times r \times r) \cdot (r)$$

|   |       |   |       |   |       |
|---|-------|---|-------|---|-------|
| A | $r^0$ | B | $r^4$ | C | $r^5$ |
| D | $r$   | E | $r^8$ | F | $r^3$ |

**2**

Find the answer when these terms are multiplied

$$(d^3) \cdot (d^1)$$

|   |       |   |       |   |       |
|---|-------|---|-------|---|-------|
| A | $d^4$ | B | $d$   | C | $d^3$ |
| D | $d^0$ | E | $d^7$ | F | $d^5$ |

**3**

Find the answer when these terms are multiplied

$$2^2 \cdot 2^2 \cdot 2^2 \cdot 2^2$$

|   |       |   |       |
|---|-------|---|-------|
| A | $2^9$ | B | $2^0$ |
| C | $2^8$ | D | $2^7$ |

**4**

Find the answer when these terms are multiplied

$$c^3 \cdot c^3 \cdot c^3 \cdot c^3$$

|   |             |   |          |
|---|-------------|---|----------|
| A | $c^{1,200}$ | B | $c^{10}$ |
| C | $c^{12}$    | D | $c$      |

**5**

Find the answer when these terms are multiplied

$$33^2 \cdot 33^2 \cdot 33^2 \cdot 33^2$$

|   |           |   |            |
|---|-----------|---|------------|
| A | $33^{80}$ | B | $33^9$     |
| C | $33^8$    | D | $33^{800}$ |

**6**

Solve the equation by multiplying powers of ten

$$10^4 \times 10^2$$

|   |        |   |        |   |        |
|---|--------|---|--------|---|--------|
| A | $10^6$ | B | $10^7$ | C | $10^3$ |
| D | $10^8$ | E | $10^4$ | F | $10^5$ |

**7**

Find the answer when these terms are multiplied

$$(d \times d) \cdot \left(\frac{1}{d \times d}\right)$$

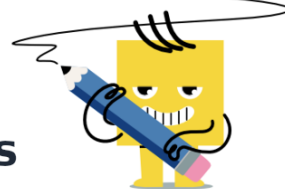
|   |       |   |          |   |       |
|---|-------|---|----------|---|-------|
| A | $d^8$ | B | $d^{-9}$ | C | $d^7$ |
| D | $d^3$ | E | $d^4$    | F | $d^0$ |

**8**

Find the answer when these terms are multiplied

$$(z^2) \cdot (z^{-4})$$

|   |          |   |          |   |          |
|---|----------|---|----------|---|----------|
| A | $z^{-5}$ | B | $z^{-2}$ | C | $z^{-7}$ |
| D | $z^{-8}$ | E | $z^7$    | F | $z^2$    |

**Apply the product rule for exponents****9**

Find the answer when these terms are multiplied

$$\left(\frac{1}{p \times p}\right) \cdot \left(\frac{1}{p \times p \times p}\right)$$

|            |            |         |
|------------|------------|---------|
| A $p^9$    | B $p^{-5}$ | C $p^6$ |
| D $p^{-7}$ | E $p^8$    | F $p^3$ |

**10**

Find the answer when these terms are multiplied

$$\frac{1}{2^3} \cdot \frac{1}{2^3} \cdot \frac{1}{2^3}$$

|                       |         |                   |
|-----------------------|---------|-------------------|
| A $\frac{1}{2^9}$     | B 1     | C $\frac{1}{2^8}$ |
| D $\frac{1}{2^{900}}$ | E $2^0$ |                   |

**11**

Find the answer when these terms are multiplied

$$(z^{-2}) \cdot (z^{-3})$$

|            |            |            |
|------------|------------|------------|
| A $z^{-2}$ | B $z^{-5}$ | C $z^{-9}$ |
| D $z^3$    | E $z^6$    | F $z^0$    |

**12**

Find the answer when these terms are multiplied

$$\frac{1}{77} \cdot \frac{1}{77} \cdot \frac{1}{77} \cdot \frac{1}{77}$$

|                    |                    |
|--------------------|--------------------|
| A $77^3$           | B $\frac{1}{77^3}$ |
| C $\frac{1}{77^4}$ |                    |

**13**

Find the answer when these terms are multiplied

$$\frac{1}{15^4} \cdot \frac{1}{15^4} \cdot \frac{1}{15^4} \cdot \frac{1}{15^4} \cdot \frac{1}{15^4}$$

|              |               |
|--------------|---------------|
| A $15^{-19}$ | B $15^{-200}$ |
| C $15^{-20}$ | D $15^{-23}$  |

**14**

Find the answer when these terms are multiplied

$$(m^7) \cdot (m^{-6})$$

|             |             |
|-------------|-------------|
| A $m^{-10}$ | B $m^{-42}$ |
| C $m^{-3}$  | D $m$       |
| E $m^{-2}$  | F $m^6$     |

**15**

Find the answer when these terms are multiplied

$$\frac{1}{y} \cdot \frac{1}{y} \cdot \frac{1}{y} \cdot \frac{1}{y} \cdot \frac{1}{y}$$

|             |            |
|-------------|------------|
| A $y^{-50}$ | B $y^0$    |
| C $y^{-5}$  | D $y^{-4}$ |

**16**

Find the answer when these terms are multiplied

$$3^{-1} \cdot 3^{-1} \cdot 3^{-1}$$

|                       |                   |
|-----------------------|-------------------|
| A $\frac{1}{3^3}$     | B $3^2$           |
| C $\frac{1}{3^{300}}$ | D $\frac{1}{3^2}$ |