Worked answers | Index laws

Exponent notation review

6 questions | 12 marks

Equivalent correct methods earn the corresponding marks.

1. Evaluate 2^5. [2 marks]

$2 \times 2 \times 2 \times 2 \times 2 = 32$.

Answer: 32

2. Evaluate 5^3. [2 marks]

$5 \times 5 \times 5 = 125$.

Answer: 125

3. Evaluate $(-3)^2$. [2 marks]

$(-3)(-3) = 9$.

Answer: 9

4. Evaluate -3^2. [2 marks]

$-(3 \times 3) = -9$.

Answer: -9

5. Write $7 \times 7 \times 7$ as a power. [1 mark]

There are three equal factors of 7.

Answer: 7^3

6. Which is larger: 2^6 or 6^2? Show both values. [3 marks]

$2^6 = 64$ and $6^2 = 36$.

Answer: $2^6 = 64$ is larger than $6^2 = 36$.