

## 1D Write prime factorization using exponents

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1. Which shows the product

$$4 \cdot 4 \cdot 4 \cdot 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7$$

expressed in exponential notation?

- A  $4^3 \times 7^5$
- B  $8^4 \times 8^7$
- C  $3^4 \times 5^7$
- D  $28^8$

2. Which represents the product

$$n \cdot n \cdot n \cdot x \cdot x$$

expressed in exponential notation?

- A  $n^2x^3$
- B  $nx^6$
- C  $n^5x$
- D  $n^3x^2$

3. Which of the following is equivalent to the expression  $5^3 \times 2^5$ ?

- A  $2 \cdot 2 \cdot 2 \cdot 5 \cdot 5 \cdot 5 \cdot 5 \cdot 5$
- B  $3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 \cdot 5 \cdot 5$
- C  $5 \cdot 5 \cdot 5 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$
- D  $5 \cdot 5 \cdot 5 \cdot 5 \cdot 5 \cdot 2 \cdot 2$

4. Which of the following shows another way to express the product  $3^2 \times 4^3$ ?

- A  $3 \cdot 3 \cdot 3 \cdot 4 \cdot 4$
- B  $3 \cdot 3 \cdot 4 \cdot 4 \cdot 4$
- C  $2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 3$
- D  $3 \cdot 3 \cdot 3 \cdot 2 \cdot 2 \cdot 2 \cdot 2$