

Name \_\_\_\_\_

### SIMPLIFYING EXPRESSIONS #3

**Directions:** Simplify each of the expressions below. Show your work and write your final answer in the line provided.

Examples:  $5x^2 \cdot 7x^4 = ?$

$$(5 \cdot 7) \cdot x \cdot x \cdot x \cdot x \cdot x \cdot x = ?$$

$35x^6$

$$5x^2 \cdot 7x \cdot -2x^3 = ?$$

$$(5 \cdot 7 \cdot -2) \cdot x \cdot x \cdot x \cdot x \cdot x \cdot x = ?$$

$-70x^6$

$$5x^2 \cdot 3x \cdot 2y^3 = ?$$

$$(5 \cdot 3 \cdot 2) \cdot (x \cdot x \cdot x) \cdot (y \cdot y \cdot y) = ?$$

$30x^3y^3$

1)  $3x^2 \cdot 7x^3 = ?$

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2)  $2x^2 \cdot 7x^5 = ?$

\_\_\_\_\_

3)  $4x \cdot 7x^3 = ?$

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4)  $5x^2 \cdot 2x^4 \cdot 3x = ?$

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5)  $2x^2 \cdot x^4 \cdot 2x^2 = ?$

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6)  $-5x^2 \cdot 7x^4 = ?$

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7)  $3x^2 \cdot (-2x^2) \cdot (-3x) = ?$

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8)  $4x^2 \cdot 3x^4 \cdot 2y^2 = ?$

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9)  $5x \cdot 2x^2 \cdot 2y^2 \cdot 2x^2 = ?$

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10)  $3x \cdot 2y \cdot 3x^2 \cdot 2y^2 = ?$

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11)  $-3x \cdot (-2y) \cdot 3x^2 \cdot 2y^2 = ?$

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12)  $x^2y^2x^2y^2x^2y^2 = ?$

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