

9-2 Laws of Exponents

Name _____ Per. ____

Select all that apply.

- Which of the following expressions are equivalent to:

$$(2)^3(2)^5$$

- $2 * 8$
- $2 * 15$
- $2 * 2 * 2 * 2 * 2 * 2 * 2 * 2$
- $2 * 2 * 3 * 5$
- $(2 * 3) + (2 * 5)$
- $2 * (5 + 3)$
- $(2 * 2 * 2) * (2 * 2 * 2 * 2 * 2)$
- $(2 * 2 * 2) + (2 * 2 * 2 * 2 * 2)$
- 4^8
- 4^{15}

- Which answer choices are equivalent expressions to one below?

$$3 * 3 * 3 * 3 * 3 * 3 * 3 * 3$$

- $3^4 * 3^4$
- $3^2 * 3^6$
- 3^5
- 3^8
- 8^3

- Describe the role of the base and exponent in an exponential expression.

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