

# EXPRESSIONS

Which value is equivalent to the expression  $4^5$ ?

A. 9

B. 20

C. 625

D. 1024

Select **all** expressions that are equivalent to  $8 \cdot 8 \cdot 8 \cdot 8 \cdot 8$ .

$8^5$

$8^1 \cdot 8^5$

$8^2 \cdot 8^3$

$(2^3)^5$

$5(2^3)$

What is the value of  $(5)^3$ ?

125

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1	2	3
4	5	6
7	8	9
0	.	-

Equation Editor

Jeffrey is 10 years old. He has a brother named Max. Max is 5 years older than twice Jeffrey's age. Write an expression that represents the relationship of Max's age in terms of Jeffrey's age,  $n$ .

$$2n + 5$$

Which expression has a coefficient of 2?

Multiple Choice

A. 3

B.  $2x^5$

C.  $4x^2$

D.  $\frac{3x}{2}$

What is the surface area, in centimeters, of a cube with a side length,  $s$ , of  $\frac{1}{3}$  cm?

**Hint:** A cube has 6 congruent surfaces/sides.

$$\text{Volume of cube} = 6s^2$$

$s$  represents the length of each side of the cube

$$\text{Volume} = 6\left(\frac{1}{3}\right)^2 \text{ cm}$$

$$\text{Volume} = \frac{6}{1} \cdot \frac{1}{3} \cdot \frac{1}{3} = \frac{6}{9} = \frac{2}{3} \text{ cm}^2$$

Sample Item	Item Type
<p data-bbox="146 311 1070 348">Select all the statements that describe the expression <math>5 + 2x</math>.</p> <ul data-bbox="146 411 977 839" style="list-style-type: none"><li data-bbox="146 411 842 448"><input type="checkbox"/> The expression represents 5 plus 2 plus <math>x</math>.</li><li data-bbox="146 488 861 525"><input checked="" type="checkbox"/> The expression represents 5 plus 2 times <math>x</math>.</li><li data-bbox="146 565 842 602"><input type="checkbox"/> The expression represents 5 plus <math>x</math> plus <math>x</math>.</li><li data-bbox="146 642 861 679"><input type="checkbox"/> The expression represents 5 plus <math>x</math> times <math>x</math>.</li><li data-bbox="146 719 919 756"><input checked="" type="checkbox"/> The expression represents the sum of 5 and <math>2x</math>.</li><li data-bbox="146 796 977 833"><input type="checkbox"/> The expression represents the product of 5 and <math>2x</math>.</li></ul>	Multiselect



Alyssa attends football games at her school. At each football game, she buys a bottle of water for \$0.75 and a candy bar for \$0.90.

Select all expressions that represent the amount of money, in dollars, Alyssa spends after attending 6 football games.

Multiselect

- $6(0.75)(0.90)$
- $6(0.75 + 0.90)$
- $6(0.75) + 6(0.90)$
- $6 + 0.75 + 0.90$
- $(6 + 0.75)(6 + 0.90)$

Create an expression without parentheses that is equivalent to  $4(6x + x)$ .

Equation Editor

$$24x + 4x = 28x$$

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1	2	3	x
4	5	6	+ - • ÷
7	8	9	< ≤ = ≥ >
0	.	$\frac{\square}{\square}$	()

Which is a different way to express  $3y$ ?

A.  $y^3$

B.  $3 + y$

C.  $y + y + y$

D.  $y \cdot y \cdot y$

Multiple Choice

Which expression is equivalent to  $4(6x + 11)$ ?

(A) 68

(B)  $68x$

(C)  $24x + 11$

(D)  $24x + 44$

Multiple Choice