

Where Will Campers Sleep in 20 Years ?

Do each exercise below, following the directions given for each section. Select your answer from the two choices given and circle the letter next to it. Write this letter in the box at the bottom of the page that contains the number of that exercise.

Write each expression in exponential form.

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|---|---------------|-----------------------|
| ① $x \cdot x \cdot x \cdot x$ | Ⓐ x^3 | Ⓔ x^4 |
| ② k cubed | Ⓝ k^3 | Ⓡ k^6 |
| ③ $12 \cdot m \cdot n \cdot n$ | Ⓜ $12mn$ | Ⓢ $12mn^2$ |
| ④ $\frac{1}{3} \cdot u \cdot u \cdot u \cdot v \cdot v$ | ⓞ uv^2 | Ⓣ $\frac{1}{3}u^3v^2$ |
| ⑤ $(a + b)(a + b)(a + b)$ | Ⓔ $(a + b)^3$ | Ⓛ $a^3 + b^3$ |
| ⑥ $(c + d)(c + d)(c - d)$ | Ⓐ $(c - d)^3$ | Ⓤ $(c + d)^2(c - d)$ |
| ⑦ $-7 \cdot x \cdot (x + 3)(x + 3)$ | Ⓐ $-21x^3$ | Ⓡ $-7x(x + 3)^2$ |
| ⑧ $(x + y)$ squared | Ⓔ $(x + y)^2$ | Ⓡ $x^2 + y^2$ |
| ⑨ the fifth power of the product of p and q | Ⓡ $(pq)^5$ | ⓞ $(p + 5)q$ |

Evaluate each expression for the given values of the variables.

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|--|---------|---------|
| ⑩ $x^2 - 3xy$ if $x = 5, y = 2$ | Ⓣ -5 | Ⓡ 10 |
| ⑪ $x^2 - y^2$ if $x = -7, y = -1$ | Ⓡ 48 | Ⓡ 52 |
| ⑫ $(x - y)^3$ if $x = 2, y = -4$ | Ⓐ 256 | Ⓤ 216 |
| ⑬ $xy^2 - 2x^3$ if $x = 3, y = 2$ | Ⓡ -42 | Ⓟ -56 |
| ⑭ $\frac{-5a^2}{a - b}$ if $a = -4, b = 6$ | Ⓡ 12 | Ⓣ 8 |
| ⑮ $\frac{3ab^3}{(2a)^2}$ if $a = 1, b = -2$ | Ⓟ 4 | Ⓣ -6 |
| ⑯ $\frac{(a + b)^4}{9 - a^2}$ if $a = -5, b = 3$ | Ⓡ 2 | Ⓝ -1 |

9	2	4	11	1	13	6	15	12	7	5	14	8	16	10	3
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