

CYU 2.2 Addition & Multiplication POE

Use when you get it right all by yourself
S Use when you did it all by yourself, but made a silly mistake
H Use when you could do it alone with a little help from teacher or peer
G Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Solving equations	10	1	
Checking solutions	9	1	
Write expressions from words		2	3 - 7
Real-World Application			5
Simplify expressions		8	

Show all work to earn full credit or give a written explanation if you feel no work is required.

1. Solve each equation. Check your work by showing you plugged your answer back in and it makes both sides of the = true.

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| <p>a. $3x - 1 = 26$ 9</p> <p>b. $-x + 4 = -24$ 28</p> <p>c. $8y + 5 = 5$ 0</p> <p>d. $-10w + 15 = 5$ 1</p> <p>e. $2 + 0.4p = 2$ 0</p> <p>f. $-3n - \frac{1}{3} = \frac{8}{3}$ -1</p> <p>g. $12 = 3j - 4$ $\frac{16}{3}$</p> | <p>h. $4a + 1 + a - 11 = 0$ 2</p> <p>i. $12x + 30 + 8x - 6 = 10$ $-\frac{7}{10}$</p> <p>j. $-\frac{3}{4}x = 9$ -12</p> <p>k. $19 = 0.4x - 0.9x - 6$ -50</p> <p>l. $q - 6q = -13 + q - 3q$ $\frac{13}{3}$</p> <p>m. $0.1x - 0.6x - 6 = 19$ -50</p> |
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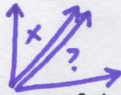
2. Two numbers have a sum of 20. If one number is p, express the other number in terms of p.

$20 - p$

3. A 5-foot piece of string is cut into two pieces. If one piece is x feet long, express the other length in terms of x.

$(5 - x) \text{ ft}$

4. Two angles are complementary if their sum is 90° . If one angle measures x° , express the measure of its complement in terms of x .



$$(90 - x)^\circ$$

5. The area of the Sahara Desert in Africa is 7 times the area of the Gobi Desert in Asia. If the area of the Gobi Desert is x square miles, express the area of the Sahara Desert as an algebraic expression in terms of x .

$$7x \text{ sq. mi.}$$

6. If x represents the first of two consecutive odd integers, express the sum of the two integers in terms of x .

$$2x + 2$$

7. If x is the first of four consecutive integers, express the sum of the first integers and the third integer as an algebraic expression containing the variable x .

$$2x + 2$$

8. Simplify the expression.

a. $5x + 2(x - 6)$ $7x - 12$

c. $-(x - 1) + x$ 1

b. $-7y + 2y - 3(y + 1)$ $-8y - 3$

d. $-(3a - 3) + 2a - 6$ $-a - 3$

9. Use a calculator to determine whether the given value is a solution of the given equation. Show what you did to test the solution.

a. $8.13 + 5.85y = 20.05y - 8.91$; $y = 1.2$

Solution

b. $3(a + 4.6) = 5a + 2.5$; $a = 6.3$

not a solution

10. Solve: $0.06y + 2.63 = 2.5562$

$$y = -1.23$$

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

