

Test #3

Evaluate each of the following expressions:

1)  $3 * 6 + (4 - 5 * 2)$

2)  $(-3)^2 - 10 / 2 + 5 * 4$

Put in parentheses so that, when evaluated, the expression gives the indicated result:

3)  $4 * 2 + 3 - 6 / 2 = 7$

4)  $-2^2 + 3 * 2 - 1 = -1$

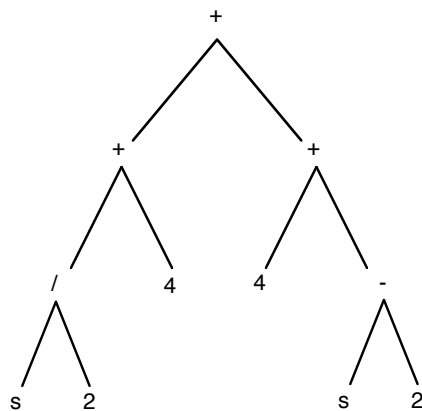
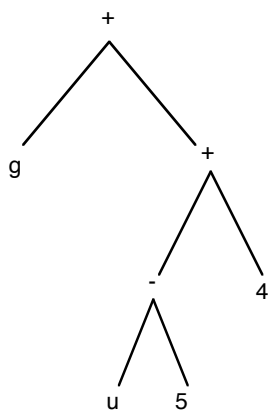
**Create an expression tree for the following expressions**

5)  $5 * 2 + 6 / 2 - 8 * 3$

6)  $x * w - (3 + y / 2)$

Write the expressions that would make the following trees:

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8) Circle **all** of the expressions to which you can apply the commutative property. Underneath the expression write what the result would be after you commute it.

A)  $(x^3) + (y - 4)$

B)  $8 - (w^2) / 6$

C)  $6 + (4 * x) / 3$

9) Circle **all** of the expressions to which you can apply the associative property. Underneath the expression write what the result would be after you associate it. Be sure to say whether it's assocL or assocR

A)  $6 * (m * 2) + 4$

B)  $(3 + a) + (5 + k)$

C)  $4 + (3 * x) / 8$

10) Circle **all** of the expressions to which you can apply either the distributive property or the collect property. Underneath the expression write what the result would be after you apply the property. Be sure to say whether you would distribute/collect L or R. \*\*You might need to use commute or associate before you can use the property.

A)  $(x - 3) * (4 + 7)$

B)  $5 * k + k * 3$

C)  $8 * (w * 2) + (8 * 2) * w$

