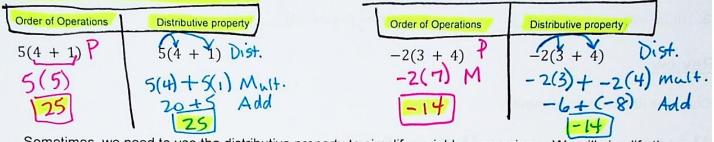
UNIT 1: SIMPLIFY EXPRESSIONS Page 1 of 2

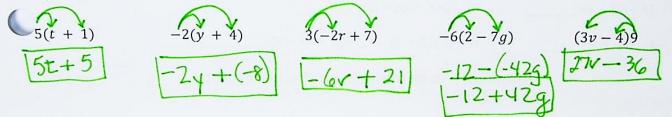
~~ Unit 1, Page 31 ~~ I can use the distributive property with numerical and variable **Distributive Property** expressions, According to the Distributive Property, you distribute or "pass out" a multiplication to each part of a sum of difference in parentheses. In 2(a + 3) = 2a + 6, we "pass out" the 2 by multiplying it by both the a and the 3. Multiply $6(\tilde{x} - 9)$ Multiply -3(h + 2)6(x) - 6(9)-3(h) + -3(2) 6x <mark>-</mark> 54 3h +(-6) Look at the examples, and then try the other problems. Arithmetic Algebraic entheses Order of Operations Distributive property lown 3(2+6) P 3(2 + 6)4(b + 3)3(8) M <u>3(2) + 3(6)</u> <u>4(b) + 4(</u>3) 24 + 18 6 4b + 12 24 Order of Operations Distributive property 7(6 - 4) P 7(6 - 4) D -2(x + 4)7(2)7(6) - 7(4) MN -2(x) + -2(4)42 - 28S -2x + (-8)

14

With numerical expressions, whether you solve using the distributive property or using the correct order of operations, you get the same solution.



Sometimes, we need to use the distributive property to simplify variable expressions. We will simplify these together.



~~ Unit 1, Page 32 ~~

Practice

Use the distributive property to simplify.

1.
$$4(j + 10) - 4j + 40$$

3. $-2(-g - 4) - 2g + 8$
5. $6(-2p + 7) - 12p + 42$

2.7 (4n - 6)_	28- 42
4. $(4c + 2)3$	
6. $5(2r-4)$	10r-20