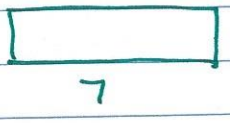
3.1 Part 3: The Distributive Property p. 83

*used to rewrite an equivalent expression

Find the perimeter:



$2(7+3) = 2(7) + 2(3)$

$20 = 20$

$2(1x+3) = 2x+6$ d.p. over addition

$2(x-3) = 2x-6$ d.p. over subtraction

$6(2+b) = 12+6b \rightarrow 6b+12$

$6(2-b) = 12-6b \quad -6b+12$

* terms w/ variables first; constants last

$4(8+j) = 32+4j \rightarrow 4j+32$

$3(2x+7) = 6x+21$

$3(2x+7+1p) = 6x+21+3p \rightarrow 3p+6x+21$

$6(-4+3y) = -24+18y \rightarrow 18y-24$

NO double signs

$7(-2+5p) = 35p-14$

the opposite of

$-(p+4) = -p-4$

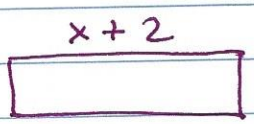
$-(-n-3) = n+3$

$-4(8-8m) = -32+32m \rightarrow 32m-32$

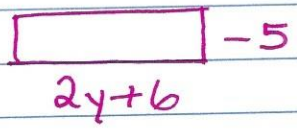
$-3(5-2b+6a) = -15+6b-18a$

$-18a+6b-15$

Find the area of each rectangle: lw

1.) 

$5(x+2) = 5x+10$

2) 

$-5(2y+6) = -10y-30$

3) 

$-4(-7+b) = 28-4b$

$28-4b \rightarrow \boxed{-4b+28}$