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| **Key Ideas:*** Distributive law - multiplying a number by a group of numbers added together is the same as doing each multiplication separately.
	+ The terms inside the brackets are multiplied by the term outside the brackets

 A black rectangular with white text and red lines  AI-generated content may be incorrect. A black rectangular with colorful numbers and lines  AI-generated content may be incorrect. A black rectangular with colorful numbers and arrows  AI-generated content may be incorrect. As such:$$a\left(b+c\right)=ab+ac$$$$a\left(b-c\right)=ab-ac$$**^this is all you need to know for this topic!** **Example 1:**$$y\left(2y-3\right)$$$$=y×2y+y×-3$$$=2y^{2}+-3y$ $$=2y^{2}-3y$$ **Example 2:**$$3+7\left(x+2\right)$$$$=3+7×x+7×2$$$$=3+7x+14$$$$=17+7x$$ **Example 3:**$$-7\left(w-3\right)$$$$=-7×w+-7×-3$$$$=-7w+21$$     |   |