

Part 1. Perform the indicated operation. Attach a separate sheet for the problems that you can't fit on this page.

	Problem	Work	
1	$(2x-3)(3x+2)$		
2	$(x+5)^2$		
3	$(x+2)(x^2-2x+4)$		
4	$(x+y-1)(x-y+1)$		
5	$(2x^3-3x^2-14x+15) \div (x-3)$		
6	$(x^4-81) \div (x-3)$		
7	$(2x^4+3x^3+6x^2+x+6) \div (x^2+2x+3)$		
8	$(2x^4+3x^3+6x^2+x+6) \div (2x^2-x+2)$		
9	$(x^7+1) \div (x+1)$		
10	$(x^2+2x+3) \div (x-1)$		

In the next section, evaluate EACH polynomial for the value  $x=3$ . Then, work each problem using numbers. Problem #1 is done as an example below:

11	$(2x-3)(3x+2)$ .	Evaluate: $(2(3)-3)(3(3)+2) = (6-3)(9+2) = 3(11) = 33$ . Also, evaluate the PRODUCT of $(2x-3)(3x+2)$ with $x=3$ . Are your answers the same?	
12			
13			
14			
15			
16			
17			
18			
19			
20			