

2) Not equivalent;

$$4(n-4)-1 = 4n-16-1 = 4n-17$$

This is not equal to $4n-15$

3) Not Equivalent;

$$3x^2 + 6x(x+2) = 3x^2 + 6x^2 + 12x = 9x^2 + 12x$$

Different from $3x^2 + 6x^2 + 2 = 9x^2 + 2$

4) Equivalent; same graph



5) No; In $3x^2$ you would square x first and then multiply by 3; in $(3x)^2$ you first multiply x by 3 and then square. If x is 2 the first gives 12 and the second gives 36.

8)

$$3x-2 + 3x-2 + 3x-2 + 3x-2 + 3x-2$$

$$5(3x-2)$$

10) $-27b - 15$

12) $2m + 1$

14b) n ; $n+23$; $2n+46$;

$$2n+46-2n=46; 46+3=49;$$

$$49-42=7$$

15a) p^3

15b) $3p$

17) Sample: Let $m=1$;

$$6+1=7$$

$$2(1) - 3(1-2) = 2 + 3 = 5$$