1) $3x+2+4x+6 = \boxed{7x+8}$ ✓ X

2) $2x+y+3z+x-y+z = \boxed{3x+4z}$ ✓ X

3) $5-8h^2+2h^4+3h-7h^4-6 = \boxed{-5h^4-8h^2+3h-1}$ X

4) $4b^4-9-6-8b^3+7b^4 = \boxed{-8b^4-8b^3-15}$ X

5) $6c+2c^4+9c-4c^4-5c+7c^2-8c^4 = \boxed{-10c^4+7c^2+10c}$ X

6) $3n^2(8n^2+5n-8) = \boxed{24n^4+15n^3-24n^2}$ X

7) $7r^2(3r^2-2r-5) = \boxed{21r^4-14r^3-35r^2}$ X

8) $(n-7)(3n+1) = 3n^2+n-21n-7 = \boxed{3n^2-20n-7}$ X

9) $(5x+2)(7x-2) = 35x^2-10x+14x-4 = \boxed{35x^2+4x-4}$ X

10) $(5p-5)(7p+6) = 35p^2+30p-35p-30 = \boxed{35p^2-5p-30}$ X

11) $(6a-6)(-2a^2-4a-8) = -12a^3-24a^2-48a+12a^2+24a+48$

$= \boxed{-12a^3-12a^2-24a+48}$ X

12) $(-6m+6)(3m^2+4m-3) = -18m^3-24m^2+18m+18m^2+24m-18$

$= \boxed{-18m^3-6m^2+42m-18}$ X

13) $(r^2+6r+5)(5r^2+r-5) = 5r^4+r^3-5r^2+30r^3+6r^2-30r+25r^2+5r-25$

$= 5r^4+31r^3+r^2$

13) $(r^2+6r+5)(5r^2+r-5)$

$5r^4+r^3-5r^2+30r^3+6r^2-30r+25r^2+5r-25$

$\boxed{5r^4+31r^3+26r^2-25r-25}$ X

14) Vertex : $(0,1)$ Minimum

15) A of S : $x = 0$ y-intercept : $(0,1)$

16) Vertex : $(3,0)$ Minimum

17) A of S : $x = 3$ x-intercept : $(3,0)$

18) Vertex : $(2,0)$ Minimum

19) A of S : $x = 2$ x-intercept : $(2,0)$

20) Domain : $(-\infty, \infty)$ Range : $(0, \infty)$

21) Domain : $(-\infty, \infty)$ Range : $(0, \infty)$