Quiz §2.7 - 2.8 Name: KEY

Simplify:

1. $2(3x+5)$ $= (2)(3x)+(2)(5) = \boxed{6x+10}$

2. $-5x(4x-5)$ $= (-5x)(4x)+(-5x)(-5) = \boxed{-20x^2+25x}$

3. $-5x^2(-4x+5)$ $= (-5x^2)(-4x)+(-5x^2)(5) = \boxed{20x^3-25x^2}$

4. $2x^2(x^2-4x+5)$ $= (2x^2)(x^2)+(2x^2)(-4x)+(2x^2)(5) = \boxed{2x^4-8x^2+10x^2}$

5. $2(3x+5)+3(2x+4)$ $= 6x+10 \ + \ 6x+12 \ = \ 6x+6x \ + \ 10+12 = \boxed{12x+22}$

6. $\frac{1}{2}(4x+6)+\frac{1}{3}(9x+6)$ $= 2x+3 \ + \ 3x+2 \ = \ 2x+3x \ + \ 3+2 = \boxed{5x+5}$

7. $.3(2x+1)+.4(2x+1)$ $= (.6)x+(.3) \ + \ (.8)x+.4 \ = \ (.6+.8)x \ + \ .3+.4 = \boxed{1.4x+.7}$

8. (3 pts)
   $2x(3x-4)-3(x^2+6)$ $= 6x^2-8x \ - \ 3x^2-18 \ = \ (6+3)x^2-8x-18 = \boxed{9x^2-8x-18}$