1. Write in the form a+bi

$6(2+5i)^{2}$

2. Solve by square roots.

 $3(x-5)^{2}-10=86$

3.Solve by factoring.

 $4x^{6}-68x^{4}=-64x^{2}$ $108x^{4}=3x^{2}$

4. Find the value(s) of k for which the expression $16x^{2}+8x+2k$ is a perfect square trinomial.

a) ½ b) 1 c) 2 d) 4

5. Find a value of k for which the expression $3x^{2}+6x+k $ if factorable (more than one answer).

a) 18 b) 0 c) -9 d) 5 e) 3 f) -3

6. Find the value of b in each perfect square trinomial

$x^{2}-bx+144$ $4x^{2}-bx+16$ $3x^{2}+bx+27$