**MIDTERM REVIEW - FACTORING**

1. **Expand and Simplify:**a) $(2x-5)^{2}-3(x+1)$

b) $\left(x-2\right)\left(x+5\right)-(4x-5)(2x-1)$

c) $3-2\left(x-4\right)-(x+5)(6x-1)$

d) $\left(3x-4\right)\left(3x+4\right)-(4x-5)^{2}$

e) $(3x-5)(2x-4)(5x-1)$
2. **Factor as much as possible:**a) $x^{2}-4x-5$

b) $16x^{2}-40x+25$

c) $6x^{2}+x-2$

d) $49x^{2}-81$

e) $0.25x^{2}-0.04$

f) $\left(x-3\right)^{2}\left(2x+1\right)^{2}-5(2x+1)\left(x-3\right)^{2}$

g) $5x^{3}\left(x-3\right)^{3}-25x^{2}\left(x-3\right)^{4}$

h) $15\left(x-y\right)^{2}-8x+8y$

i) $(2x+3)^{2}-4\left(2x+3\right)-12$

j) $6(x+2)^{2}-11\left(x+2\right)-7$

k) $3(x+5)^{2}-23\left(x+5\right)+20$

l) $(x^{2}-9)^{2}-16(x+3)^{2}$

m) $4(x-5)^{2}-9(x+1)^{2}$