

# IOCMR Extra Algebra Homework

1) Expand and simplify

a)  $5(3x+2) - 3(x+1)$

b)  $(3x+2)(x-4)$

2) Factorise

a)  $15x^2y - 10xy^2$

b)  $8pqr + 4qrt$

3) Solve

a)  $5x - 4 = 26$

b)  $7x + 8 = 5x + 2$

c)  $4(x+2) = 3(2x-1) + 1$

d)  $\frac{3x+2}{4} = 2$

e)  $\frac{x}{3} - 6 = 4$

4)  $s = ut + \frac{1}{2}at^2$

Find  $s$  when

$u = 3, t = 10, a = 4$

5)  $v^2 = u^2 + 2as$

Find  $v$  when

$u = 8, a = 8$

$s = 50$

Give answer  
to 3 sig fig