$$(u+v)^3-(u+v)^2 = A^3-A^2$$

$$(u+v)^2\left((u+v)-1\right) = \boxed{A^2\cdot A} - \boxed{A^2\cdot 1}$$

$$(u+v)^2\cdot(u+v-1) = A^2(A-1)$$

$$A^2\cdot A - A^2\cdot 1 = A^3-A^2$$

$$3^3-3^2 = 27-9 = 18 \neq 3$$

$$A^3-A^2 =$$

$$\frac{A^3}{A^2} = A^{3-2}$$

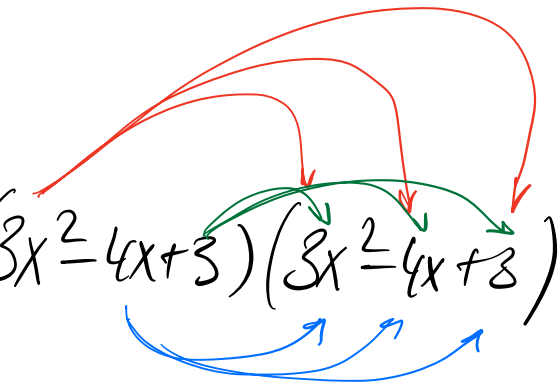
$x^2+5x+6 = (x+2)\cdot(x+3) = x^2+3x+2x+6$

$= x^2+5x+6$

Factoriser

$a(x) = 3x^2-4x+3$

$(a(x))^2 = (3x^2-4x+3)^2 = (3x^2-4x+3)(3x^2-4x+3)$



	$3x^2$	$-4x$	$+3$
$3x^2$			
$-4x$			
$+3$			

$(a(x))^2 = a(x)\cdot a(x)$

2.1.9 j

$$(x+y)(x-2y)(2x-y) - (2x+y)(x-2y)(x-y) =$$

$$(x^2-2xy+xy-2y^2)(2x-y) - (2x+y)(x-2y)(x-y) =$$

$$(x^2-xy-2y^2)(2x-y) - (2x+y)(x-2y)(x-y) =$$

2.2.1 f

$$24y^3z^5 - 36yz^2 =$$

$$12yz^2 \cdot 2y^2z^3 - 12yz^2 \cdot 3 =$$

$$12yz^2(2y^2z-3)$$

2.21 m)

$$(x-3)(x+1)+2(x-3)^2-(x-3)=$$

$$(x-3)(x+1)+(x-3)\cdot 2\cdot(x-3)-(x-3)\cdot 1=$$

$$(x-3)\left(x+1+2\cdot(x-3)-1\right)=$$

$$(x-3)(3x-6)=(x-3)(3\cdot x-3\cdot 2)$$

$$=(x-3)\cdot 3\cdot(x-2)$$

p) $9x^4+16y^2+24x^2y=$ $\quad A^2+2AB+B^2$

$A=3x^2 \quad B=4y$

$$(3x^2)^2+2\cdot 12x^2y+(4y)^2=$$

$(A+B)^2$

$$(3x^2)^2+2\cdot 3x^2\cdot 4y+(4y)^2=(3x^2+4y)^2$$

k) $\frac{u^4}{625} - \frac{v^4}{81} = \left(\frac{u}{5}\right)^4 - \left(\frac{v}{3}\right)^4$

$A^2 - B^2 = (A+B)(A-B)$ $= \left(\left(\frac{u}{5}\right)^2\right)^2 - \left(\left(\frac{v}{3}\right)^2\right)^2$

$= \left[\left(\frac{u}{5}\right)^2 - \left(\frac{v}{3}\right)^2\right]\left[\left(\frac{u}{5}\right)^2 + \left(\frac{v}{3}\right)^2\right]$

formulė (A^2+B^2)

$= \left(\frac{u}{5} - \frac{v}{3}\right)\left(\frac{u}{5} + \frac{v}{3}\right)\left[\left(\frac{u}{5}\right)^2 + \left(\frac{v}{3}\right)^2\right]$ IRRED.

$x^4 - y^4 = (x^2-y^2)(x^2+y^2)$

$= (x+y)(x-y)(x^2+y^2)$