

## Homework Questions????

Page 155

6a, 10(a,b,c), 14(a,b,c), 15(b i, ii, iii), 16(a,b)

$$15 \text{ b) i) } 4s^2t^2 - 12s^2t^3 + 36st^4$$
$$4s^2t^2 (s^2 - 3st + 9)$$

$$\text{ii) } 12s^2t^3 - 4s^2t^2 - 36st^2$$
$$4s^2t^2 (3st - s - 9)$$

$$16) a) 25xy + 15x^2 - 30x^2y^2$$

$$5x (5y + 3x - 6xy^2)$$

$$c) 9p^4q^2 - 6p^3q^3 + 12p^2q^4$$

$$3p^2q^2 (3p^2 - 2pq + 4q^2)$$

e

# Factor out the GCF

$$\#1) \quad 36x^6y^3z - 12x^{11}y^2z^4 - 18x^{15}y^8$$

$$6x^6y^2 (6yz - 2x^5z^4 - 3x^9y^6)$$

$$\#2) \quad 4p^9q^2 - 16p^{15}q^3$$

$$4p^9q^2 (1 - 4p^6q)$$

Simplify then factor out GCF

$$4 + 10x^2 - 14y^4 - 2x^2 - 4y^4 + 12$$

collect like terms

$$10x^2 - 2x^2 - 14y^4 - 4y^4 + 4 + 12$$

Now Simplified  $\rightarrow$

$$8x^2 - 18y^4 + 16$$

Now factor out GCF

$$2(4x^2 - 9y^4 + 8)$$

## 3.3 Common Factors of a Polynomial

### Exercises Page 155

**A**

4 5  $6b(i-iv)$

**B**

7  $5df$  8  $5df$  9  $5f$  10  $5df$  11 12 13 14

15 16 17 18 19 20

$iv-vi$

**C**

21 22

Reflect

6  $b(i \text{ to } v)$

7  $(bdf)$

8  $(bdf)$

9  $(bf)$

10  $(bdf)$

15  $b(i:v, v:i)$

16  $(d, f)$

