Factorising Single Brackets

Factorise the following expressions fully by taking out the highest common factor.

1. Factorise: $3x + 12$

2. Factorise: $8y - 4$

3. Factorise: $a^2 + 5a$

4. Factorise: $6p^2 - 4p$

5. Factorise: $10x + 15y$

6. Factorise: $12ab + 18a$

7. Factorise: $x^3 + x^2$

8. Factorise: $5y^4 - 3y^2$

9. Factorise: $9a^3b^2 + 6ab^4$

10. Factorise: $12xy - 8x^2y + 4xy^2$

11. Factorise: $p(q + 2) - 5(q + 2)$

12. The area of a rectangle is $18x^2 + 12x$. If the width is $6x$, find an expression for its length.