

1.1 Multiplying and Factoring Polynomials Expressions
Algebra 1B

Name _____
Period _____

For each of the following, factor out the greatest common factor.

1) $6y^2 + 18$

2) $27y^2 + 18y$

3) $21b - 15a$

4) $14c^2 + 2c$

5) $3x^2 - 27$

Multiply the following expressions.

6) $(n - 5)(n + 5)$

7) $(4 - y)(4 + y)$

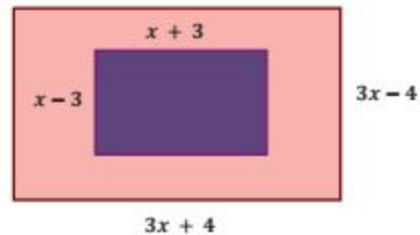
8) $(k + 10)^2$

9) $(4 + b)^2$

10) When you multiply two terms by two terms you should get four terms. Why is the final result when you multiply two binomials together only three terms? Give an example of how your final result can end up with only two terms?

11) The measure of a side of a square is x units. A new square is formed with each side 6 units longer than the original square's side. Write an expression to represent the area of the new square.

In the accompanying diagram, the width of the inner rectangle is represented by $x - 3$ and the length by $x + 3$. The width of the outer rectangle is represented by $3x - 4$ and the length by $3x + 4$.



12) Write an expression to represent the area of the larger rectangle.

13) Write an expression to represent the area of the smaller rectangle.

14) Express the area of the region inside the larger rectangle but outside the smaller rectangle as a polynomial in terms of x .