Chapter 10.1-10.4 Test Review

Name: _____

Section 10.1*: *Adding and Subtracting Polynomials

Find the sum or difference.

1. $(x^2 + 2x + 1) + (4x^2 + 5x + 3)$

2. $(3x^2 + 5x + 4) - (x^2 + 2x + 1)$

3. $(-5x + 3x^2 + 8) + (2 + 3x - 6x^2)$

4. $(8x^2 + 6x + 3) - (5x^3 + 4x^2 + 3x - 2)$

Section 10.2:* *Multiplying Polynomials

Find the product.

5. $2x(3x - 5)$

6. $(x + 3)(x + 2)$

7. $(2x + 1)(x + 3)$

8. $(4x + 3)(2x - 5)$

Section 10.3: *Multiplying Special Polynomials*

Find the product.

9. $(x-8)(x+8)$

10. $(x+5)^2$

11. $(2y-7)^2$

12. $(2y-9)(2y+9)$

Section 10.4: *Solving Quadratic Equations in Factored Form.*

Solve the equation.

13. $(3x+4)(x-2)=0$

14. $(x+3)^2=0$

15. $3(x+3)(x-1.5)=0$

16. $x(3x+5)(2x-1)=0$

Graph the following quadratics in factored form. Identify the graph's x-intercepts, axis of symmetry (AOS), vertex, and tell whether the graph opens up or down.

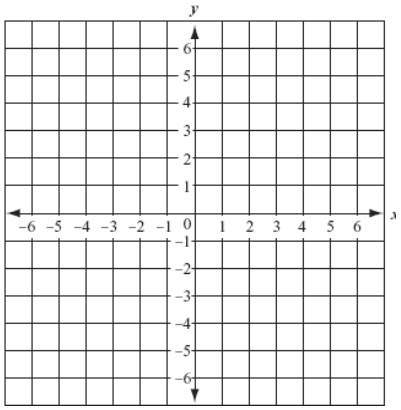
17. $y = (x + 2)(x - 2)$

x-int: _____

AOS: _____

vertex: _____

opens: _____



x					
y					

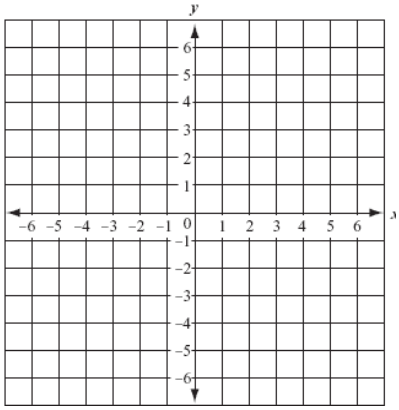
18. $y = (x + 5)(x + 3)$

x-int: _____

AOS: _____

vertex: _____

opens: _____



x					
y					

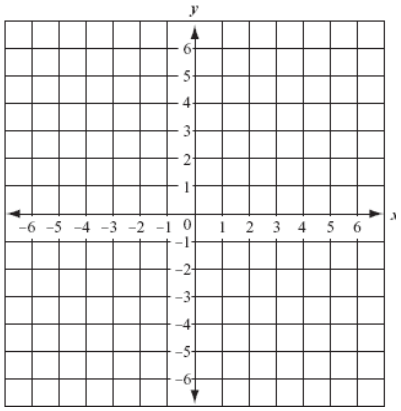
19. $y = (x - 4)(x + 2)$

x-int: _____

AOS: _____

vertex: _____

opens: _____



x					
y					

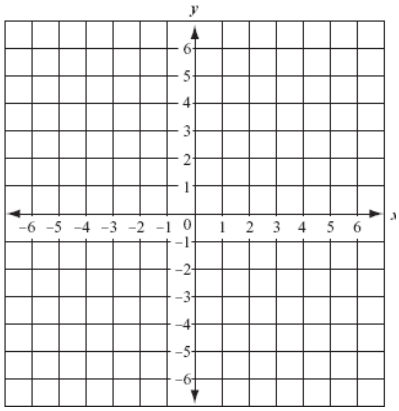
20. $y = (x - 2)(x - 6)$

x-int: _____

AOS: _____

vertex: _____

opens: _____



x					
y					