

Answer Key- Part 2

**Ch 4**

1a.  $268 \text{ cm}^2$    b.  $8800 \text{ cm}^2$    c.  $414.69 \text{ cm}^2$

2.  $509 \text{ cm}^2$

**Ch 6**

1. 2                      2. -2

3. 7                      4. 23

5.  $-3x^2 - 5$     6.  $2x^2 - 21x + 9$

7.  $15x^2 - 12x$

8.  $4x^2 - 10x - 6$

9.  $-2x^2 + 3x - 5$                       10. -2

11a. 4,2,2,-7,x,y

b. 5,3,-2,-1,1,a,b

c. 4,3,3,4,-8,x,y,z

12.  $-4x^2 - 2x + 10$

13.  $-4x^2 + 5x - 2$

14.  $9x^2 - 10x - 3$

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15.  $18x^3 - 6x^2 + 15x$

16.  $3x^2 + 7x - 20$

17.  $-6x^2y^2 - 2xy^2 + 3$

18.  $4x + 12$

19.  $5x^2 + 20x$

20.  $5x + 8$

21.  $8x - y$

11. Complete the table for each polynomial.

	<i>Degree</i>	<i># of terms</i>	<i>Coefficients</i>	<i>Variables</i>
a) $2x^3y - 7xy$				
b) $-2ab^2 - ab + b^5$				
c) $3x^2yz + 4yz - 8z^2$				

12. Simplify the polynomial  $-5x^2 + 3x + x^2 - 5x + 10$ .

13. Determine the sum  $(2x^2 + 4x - 5) + (-6x^2 + x + 3)$ .

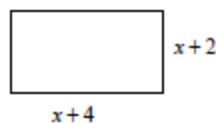
14. Determine the difference of  $(4x^2 - 3x - 1) - (-5x^2 + 7x + 2)$ .

15. Determine the product of  $(-3x)(-6x^2 + 2x - 5)$ .

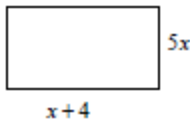
16. Determine the product of  $(3x - 5)(x + 4)$ .

17. Determine the quotient of  $(24x^3y^2 + 8x^2y^2 - 12x) \div (-4x)$ .

18. Express the perimeter of this rectangle as a polynomial and simplify.



19. Express the area of this rectangle as a polynomial and simplify.



20. A rectangle has a perimeter of  $(16x + 24)$  cm. If the width is  $(3x + 4)$  cm, find the length.

21. The perimeter of the triangle below is  $12x - 8y$ . Show an expression that determines the length of the missing side and then simplify completely.

