1 Functions Learned

Equal(==)	And(&&)	Or(||)	Not(!)	Element($\in$)	ForAll
Exist	Implies	Union($\bigcup$)	Intersection($\bigcap$)	Complement	Append
AppendTo	Tally	Join	If	Which	Piecewise
Sum	CoefficientList	Product	NSum	NProduct	Infinity(∞)
Point	Line	Graphics	Graphics3D	Manipulate	

The short cuts for Union, Intersection, Element, and Infinity are obtained in Mathematica by typing \[Union], \[Intersection], \[Element], and \[Infinity] respectively. Alternatively, you can type *esc* un *esc*, *esc* el *esc*, and *esc* inf *esc*.

2 Problems

From electronic text

1. Problem 5.1

2. Problem 5.2

3. Example 5.3

4. Problem 5.4

5. Problem 5.5

6. Problem 5.6

7. Problem 5.7

8. Problem 5.8 (The solution in the book is incorrect for several reasons. The figure in the book corresponds to $a = 3$ and $b = 8$, which isn't what they said it should be and notice that here a and b are positive (when they shouldn't be) and additionally the figure actually shows the opposite inequality that we are supposed to be showing. Try choosing negative values for a and b with $a < b$ and show that you obtain a figure that actually shows what you want.)

9. Problem 6.1

10. Problem 6.2

11. Exercise 6.1

12. Problem 6.3

13. Problem 6.4

14. Problem 6.5

15. Exercise 6.2

16. Exercise 6.3

17. Exercise 6.4

18. Exercise 6.5

19. Exercise 6.6

20. Problem 6.6

21. Exercise 6.7

22. Exercise 6.8

From lesson on graphics primitives and directives

23. Exercise 1

24. Exercise 2

25. Exercise 3

26. Exercise 4

27. Exercise 5

28. Exercise 6