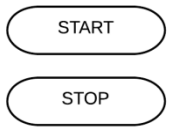
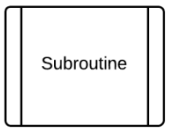
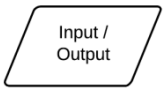
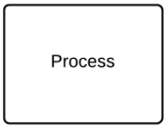
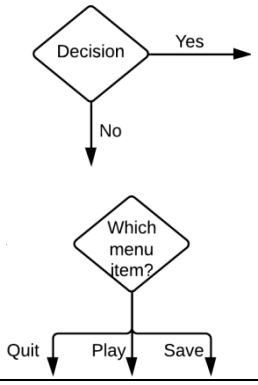
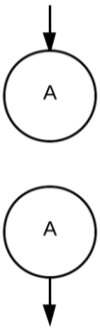
Flow Diagrams 1 - Reading

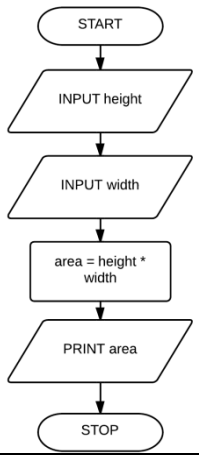
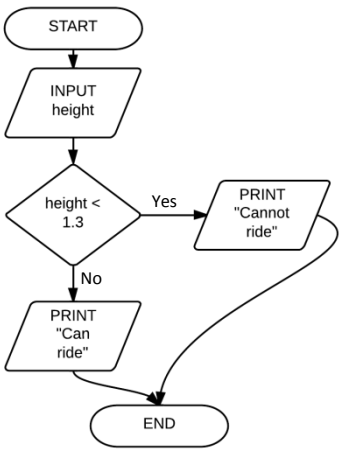
Algorithms are the way in which we solve problems. They can be expressed as pseudocode, which is a written explanation similar to program code that can be read by any programmer. Alternatively they can be expressed as flow diagrams, which are a diagram form of how the problem will be solved.

The following are symbols used in flow diagrams.

Symbol	Meaning	Name & Symbol	Meaning
	Terminator Symbol Used to start a program or stop a program		Subroutine Symbol This allows you to call other subroutines. Other flow diagrams could therefore be integrated and reused
	Input or Output Symbol Used when you get input into the computer system or output from the computer system		Process Symbol This performs a process such as adding two numbers
	Decision Symbol A choice will be given. Either a true/false or yes/no will be the branches from the choice or it could have multiple options such as from a menu choice		Connector Symbol A connector allows you to connect a flow diagram from one area on a page to another. It is useful if you run out of room on a page and need to use a second page

Examples

Flow diagram	Pseudocode	Flow diagram	Pseudocode

	A program to calculate the area of a rectangle
	
	`height ← USERINPUT`
	`width ← USERINPUT`
	`area ← height * width`
	`OUTPUT area`
			A program to work out if someone can ride a rollercoaster
			
			`height ← USERINPUT`
			`IF height < 1.3 THEN`
			`OUTPUT 'Cannot ride'`
			`ELSE`
			`OUTPUT 'Can ride'`
			
			`ENDIF`

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