# What can the turtle do?

# Movement

## forward/backward

**forward** - Moves the turtle in the direction it is facing by the specified distance.

**backward** – Moves the turtle in the direction opposite to the one it is facing by the specified distance.

Use

t.forward(distance) t.backward(distance)

Example

t.forward(100) t.backward(80)

#### left

Rotates the turtle to the left or right by the specified number of degrees.

Use

Example

t.left(50) t.right(75)

## setheading

Sets the turtle to be facing in the specified direction. A heading of 0 indicates the turtle is facing due east, with heading being measured anticlockwise from this direction.

Use

t.setheading(degrees)

Example

t.setheading(0)

t.setheading(90)

t.setheading(-90) = t.setheading(270)

#### setpos

Moves the turtle to the specified location. A position of (0,0) indicates the centre of the canvas. This will not affect the direction in which the turtle is facing. If the turtle's pen is down, this will draw a line from its current position to the new position.

Use

t.setpos(x,y)

Example

**t.setpos(30,100)** starting at (0,0)

# circle

Draws a circle of the specified radius starting at the turtle's current position.

Use

t.circle(radius)

Example

t.circle(60)

# Pen commands

# penup

Lifts the turtle's pen. This will prevent the turtle from tracing a line when it moves.

Use

t.penup()

#### pendown

Puts the turtle's pen down. This means the turtle will trace a line when it moves.

Use

t.pendown()

# pencolor

This will set the colour of the turtle's line trace.

Use

```
t.setcolor('color')
Example
  t.setcolor('blue')
  t.setcolor('red')
  t.setcolor('green')
```

# Getting information from the turtle

#### xcor

Evaluates to the value of the current x coordinate of the turtle.

Use

t.xcor()

#### ycor

Evaluates to the value of the current y coordinate of the turtle.

Use

t.ycor()

# offscreen

Evaluates to yes or no depending on whether the turtle is on or off the canvas.

Use

t.offscreen()

#### heading

Evaluates to the direction, in degrees, in which the turtle is currently facing.

Use

t.heading()