

MODULE 2 • CHALLENGE 1

SHORT SCRIPTS CHALLENGE 1



Extends **Investigation 1**. Use the Beetle sprite from the project **20-Drawing Numerals**.

► Run this *setup script* before any task in this challenge, so that the Beetle always starts heading north, with its pen size 10 and dark blue, and the pen down.

```

when green flag clicked
  go to x: 0 y: 0
  point in direction 0
  set pen size to 10
  set pen color to dark blue
  pen down
  erase all
  
```

► Programmers always want to keep their programs (scripts) as short and simple as possible, and also *easy to read*. While it is easy to simplify scripts (a) and (b), it may be harder to do so with the scripts (c) and (d). Have a go yourself.

a

```

pen down
set pen color to red
move 30 steps
move 50 steps
pen up
set pen color to red
turn 135 degrees
turn 45 degrees
pen up
  
```

b

```

repeat 1
  set pen size to 5
  set pen color to orange
  set pen color to red
  set pen size to 5
  turn 40 degrees
  turn 320 degrees
  move 50 steps
  
```

c

```

set pen size to 5
repeat 6
  move 40 steps
  set pen size to 5
  turn 60 degrees
  set pen color to dark blue
  
```

d

```

repeat 8
  move 50 steps
  pen up
  pen down
  move 20 steps
  turn 15 degrees
  turn 255 degrees
  
```