

Using Repeats – Sheet 3

Look again at the instructions for drawing a square.

Children should be encouraged to realise that the FD and RT (or LT) commands have in fact been repeated a number of times, four in the case of the square.

Show them how this can be written for the version of LOGO that is being used in the classroom.

e.g. REPEAT 4 [FD 100 RT 90]

Look again at the command line used to draw the triangle in the previous example.

FD 150 RT 120 FD 150 RT 120 FD 150 RT 120

Ask the children to hypothesise as to how it might be written using a REPEAT command.

Using a pre-prepared worksheet ask the children to try a few repeat sequences. The first two can be the examples above. Include left (LT) commands as well as right turns (RT) in the examples. Ask them to hypothesise how many sides will drawn in each example

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REPEAT 5 [FD 100 RT 72]
REPEAT 6 [FD 100 LT 60]
REPEAT 8 [FD 50 LT 45]
REPEAT 9 [FD 50 RT 40]
REPEAT 10 [FD 50 RT 36]
REPEAT 360 [FD 1 RT 1]
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When these have been completed ask them to try changing the numbers in the procedures for the triangle and square, what happens?

Does this work with the other shapes as well?

