



Functional Skills Certificate
June 2015

Functional Mathematics Level 2 Data Book (Examination)

4368

Insert

Instructions

- This copy of the Data Book is for use in the examination. It should **not** be given to candidates in advance.

Advice

- This book will not be collected in for marking. Ensure that all working that you wish to have marked is written in the spaces provided in the question/answer book.

4368

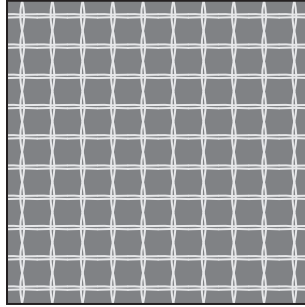
QAN 500/8702/2

Data Sheet for Rug Making

This is what you need to make a rug.

Rug canvas

A rug canvas has a lot of small holes.

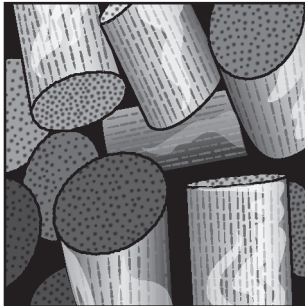


You need a piece of rug canvas the same size as the rug you want to make.

Strands of wool

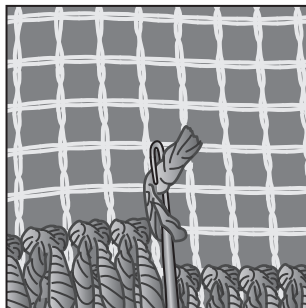
You make rugs by attaching strands of wool to the rug canvas.

You can buy packs of strands of wool.



A latch hook

You use a latch hook to attach the wool to the rug canvas.



How many strands of wool you need to make a rug

Use this formula to work out the number of strands of each colour of wool you need.

$$N = \frac{AH}{6.25}$$

where

N is the number of strands of wool you need of a particular colour

A is the area of that colour on the rug in square centimetres

H is the number of holes per square inch of the rug canvas.

Example

Mary makes a rug with a red rectangle in the middle.

The red rectangle has length 40 cm and width 20 cm

She uses a rug canvas with 9 holes per square inch.

How many strands of red wool does she need for the rectangle?

$$\begin{aligned} A &= 40 \times 20 \\ &= 800 \text{ cm}^2 \end{aligned}$$

$$H = 9$$

$$N = \frac{800 \times 9}{6.25}$$

$$= 1152$$

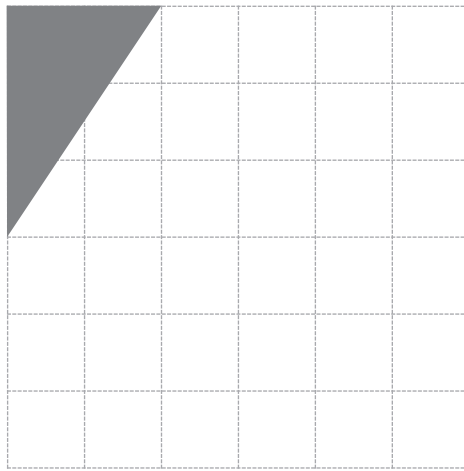
Mary needs 1152 strands of red wool.

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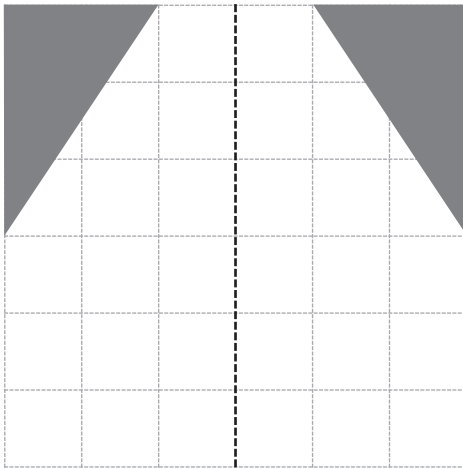
Turn over ►

This is how you can design a rug with a symmetrical pattern.

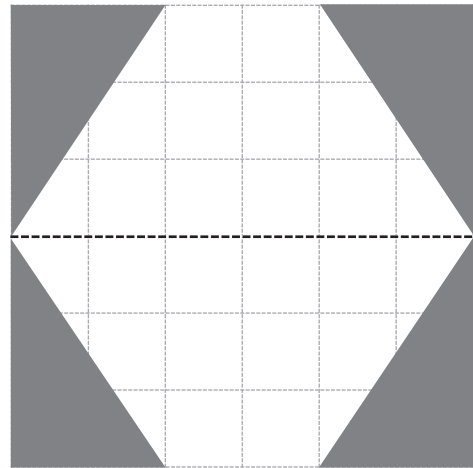
Start with a shape on a grid.



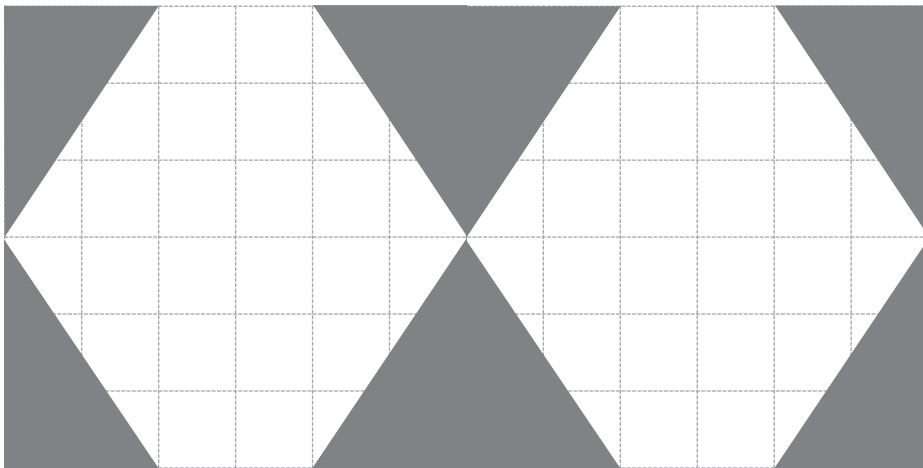
Reflect in a vertical line.



Reflect in a horizontal line.



Repeat the pattern.



Data Sheet for High Pond Activity Centre

High Pond is an activity centre for school students and staff.

Activities

Rock climbing	Canoeing	Hill walking	Archery
Abseiling	Orienteering	Caving	Horse riding

Costs

	Cost per person	
	Student	Staff
Monday to Friday	£250	£280
Friday to Monday	£180	£200
Free staff places 1 free staff place for every 12 students		

The total number of students and staff must be between 36 and 55 inclusive.

There must be at least 1 member of staff for every 8 students.

All meals and activities are included in the costs.

Contact the Centre Manager to make a booking.

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