L2 Scale drawing practice questions

Name _____ Date _____

1. Yvonne wants to buy a newly built house.
   She finds this picture of the house she wants online.

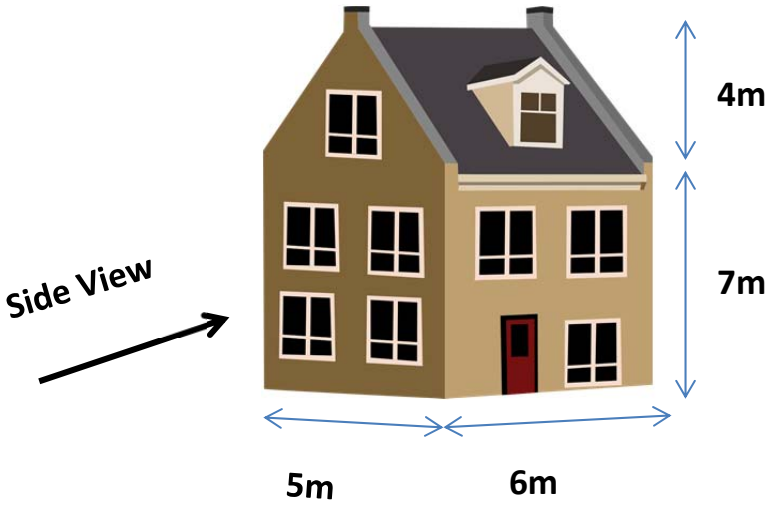


Diagram **not** accurately drawn

Yvonne wants a scale drawing of the side view of the house.
She uses a scale of 1:100
Draw the side view of the house on the grid. Remember to use the scale.

(Each square on this grid measures 1cm x 1cm)

L2 Scale drawing practice questions

Name _____ Date _____

2. Graham wants to build a birdhouse for his garden.

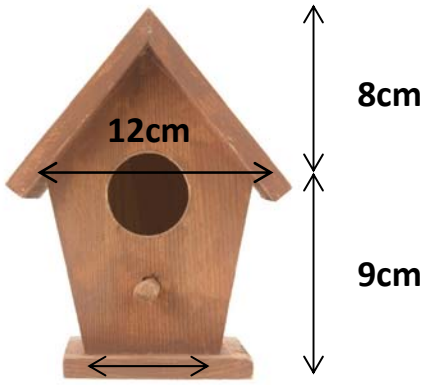


Diagram **not** accurately drawn

He needs to make a scale drawing to cut the correct shape out of a piece of wood for the front of the birdhouse. He uses a scale of 1:2

Draw the front of the birdhouse, not including the base or the roof pieces. Remember to use the scale.

(Each square on this grid measures 1cm x 1cm)

3. Khalida is going to buy a shed to store her gardening tools.
   She finds this shed online.

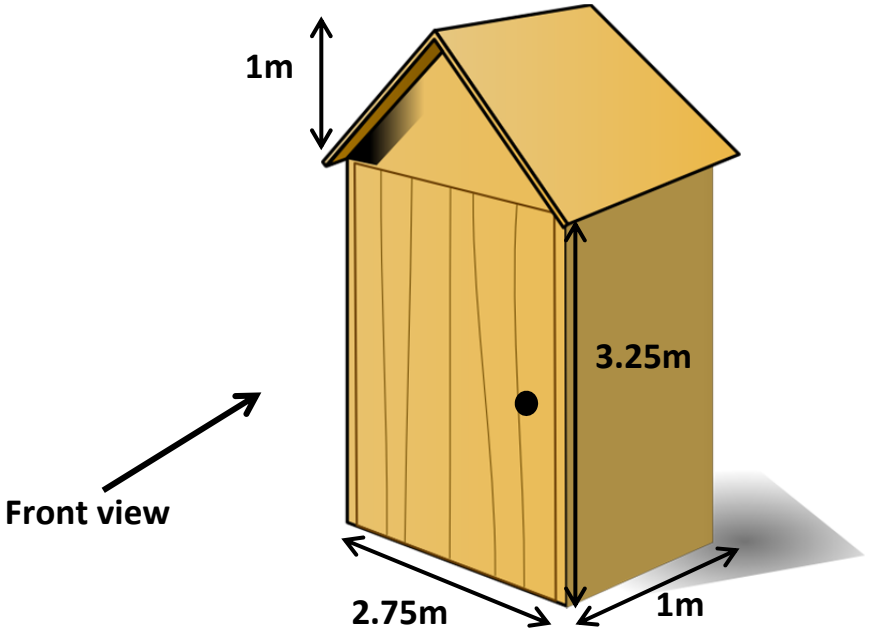


Diagram **not** accurately drawn

Khalida needs a scale drawing of the front view of the shed.
She uses a scale of 1:50

Draw the front view of the shed for Khalida on the grid. Remember to use the scale.

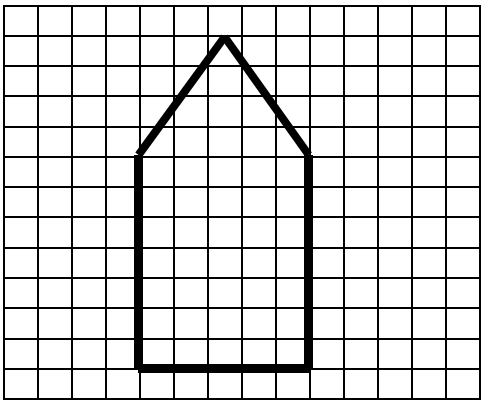
(Each square on this grid measures 5mm x 5mm)

L2 Scale drawing practice questions

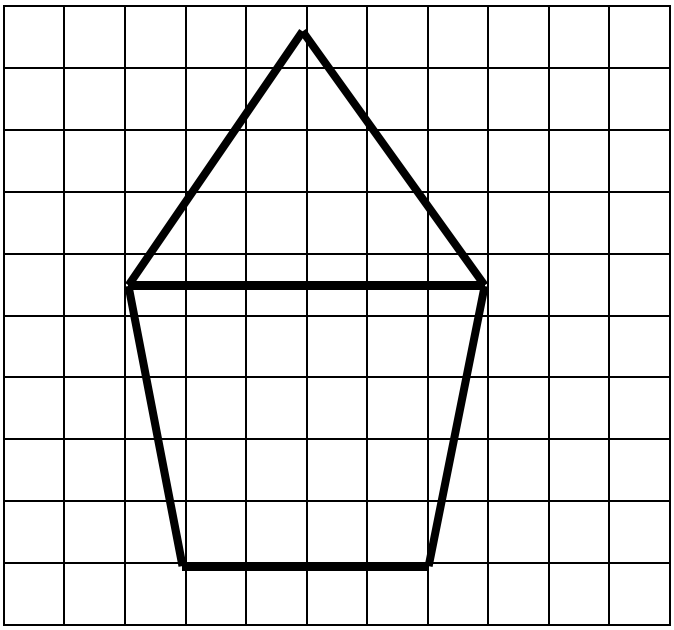
Answers and curriculum mapping

Answers

1. Each square = 1cm
   Scale = 1:100
   Each square on the grid = 100cm (1m) in real life
   5m = 500cm = 5 squares
   7m = 700cm = 7 squares
   4m = 400cm = 4 squares



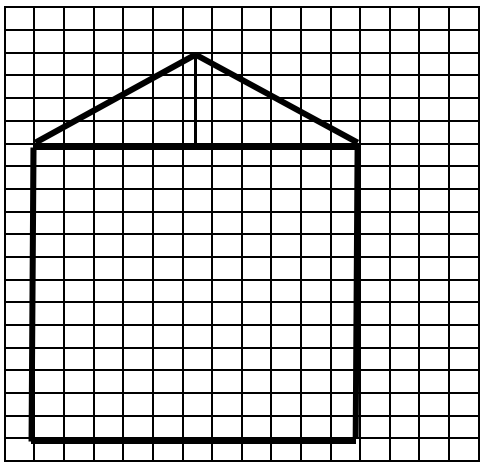
2. Each square = 1cm
   Scale = 1:2
   Each square on the grid = 2cm in real life
   8cm ÷ 2cm = 4 squares
   12cm ÷ 2cm = 6 squares
   9cm ÷ 2cm = 4.5 squares



3. Each square = 5mm

   Scale 1:50
   5:250 (1 square = 250mm in real life)

   2.75m = 2750mm
   2750 ÷ 250 = 11squares
   3.25m = 3250mm
   3250 ÷ 250 = 13 squares
   1m = 1000mm
   1000 ÷ 250 = 4 squares



L2 Scale drawing practice questions

Answers and curriculum mapping

FUNCTIONAL MATHEMATICS **Coverage and Range statements (indicative only)**

Coverage and range statements provide an indication of the type of mathematical content candidates are expected to apply in functional contexts. Relevant content can also be drawn from equivalent National Curriculum levels and the Adult Numeracy standards. ✓ *indicates the main coverage and range skills covered in this resource, although these may vary with the student group and how the resource is used by the teacher.*

Reference: *Ofqual (2009), Functional Skills criteria for Mathematics: Entry 1, Entry 2, Entry 3, level 1 and level 2. https://www.gov.uk/government/publications/functional-skills-criteria-for-mathematics*

Level 1

a) Understand and use whole numbers and understand negative nos. in practical contexts ✓
b) Add, subtract, multiply and divide whole numbers using a range of strategies ✓
c) Understand and use equivalences between common fractions, decimals and percentages
d) Add and subtract decimals up to 2 decimal places
e) Solve simple problems involving ratio, where one number is a multiple of the other
f) Use simple formulae expressed in words for one- or two-step operations
g) Solve problems requiring calculation, with common measures, including money, time, length, weight, capacity and temperature ✓
h) Convert units of measure in the same system ✓
i) Work out areas and perimeters in practical situations
j) Construct geometric diagrams, models and shapes ✓
k) Extract and interpret information from tables, diagrams, charts and graphs ✓
l) Collect and record discrete data and organise and represent information in different ways
m) Find mean and range
n) Use data to assess the likelihood of an outcome

Level 2

a) understand and use positive and negative numbers of any size in practical contexts
b) carry out calculations with numbers of any size in practical contexts, to a given number of decimal places ✓
c) understand, use and calculate ratio and proportion, including problems involving scale ✓
d) understand and use equivalences between fractions, decimals and percentages
e) understand and use simple formulae and equations involving one or two operations
f) recognise and use 2D representations of 3D objects
g) find area, perimeter and volume of common shapes
h) use, convert and calculate using metric and, where appropriate, imperial measures ✓
i) collect and represent discrete and continuous data, using information and communication technology (ICT) where appropriate
j) use and interpret statistical measures, tables and diagrams, for discrete and continuous data, using ICT where appropriate.
k) use statistical methods to investigate situations
l) use probability to assess the likelihood of an outcome

This resource also covers many **adult numeracy curriculum** elements. http://www.excellencegateway.org.uk/content/etf1075