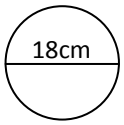
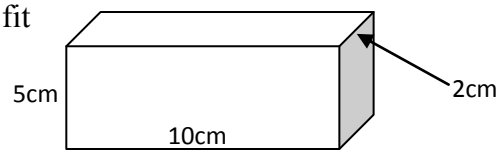
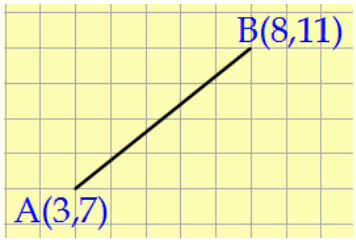
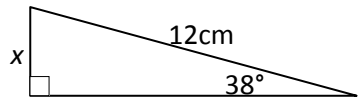
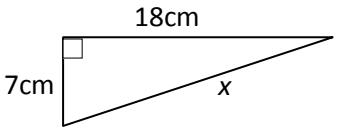
Level 4 Revision Checklist 3

a) Evaluate $20 - 4 \times 7 + 1$ $(20 - 4) \times 7 + 1$ $20 - (4 \times 7 + 1)$	**BIDMAS** ☹ 😐 ☺
b) Write: 772300000 into scientific notation $3{\cdot}81 \times 10^{-6}$ in full.	**Scientific Notation** ☹ 😐 ☺
c) NASA's X-43 jet has a top speed of 6,600mph. How far would it travel if it kept flying non-stop at that speed for two weeks? Give your answer in scientific notation.	**Distance, Speed & Time** ☹ 😐 ☺
d) Pete played three rounds of golf and his average number of shots per round was 76. He played a fourth round and his average reduced to 74. How many shots did he take in his fourth round?	**Statistics** ☹ 😐 ☺
e) Bobbi spends $\frac{2}{5}$ of her money in one shop and $\frac{1}{4}$ of her money in another. What fraction of her money does she have left?	**Fractions** ☹ 😐 ☺
f) Simplify: $2(x+4)$ $5+3(2x-5)+1$. Factorise: $20x-30$ $56x-28$ y^2+6y.	**Brackets & Factors** ☹ 😐 ☺
g) Calculate the circumference and area of this circle, giving your answers to 3 significant figures: 	**Circles** ☹ 😐 ☺
h) How many of these cuboids will fit inside a cuboid with a volume of $1m^3$ (1m x 1m x 1m)? 	**Volume of Prisms** ☹ 😐 ☺
i) Change the subject of these formulae to x: $y = x + 3$ $t = 3x$ $m = 2x - n$.	**Changing the Subject** ☹ 😐 ☺
j) The probability of a broken egg being found in an egg box is 8%. How many eggs would you expect to be broken in a crate of 300 egg boxes?	**Probability** ☹ 😐 ☺
k) Calculate the gradient of the line between the points A (3,7) and B(8,11). 	**Gradients & Lines** ☹ 😐 ☺

l) Calculate x.





Trigonometry

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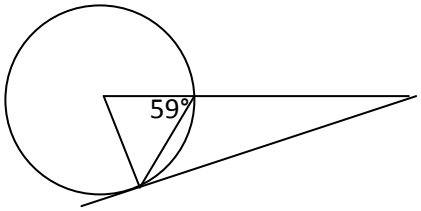
m) Copy these diagrams and calculate the remaining angles:



Angle & Circle Theorems

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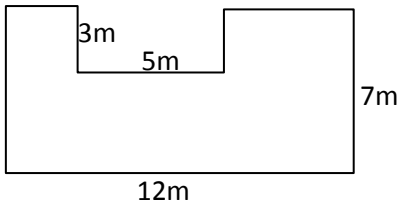
n) Calculate the perimeter and area of this shape.



Quadrilaterals

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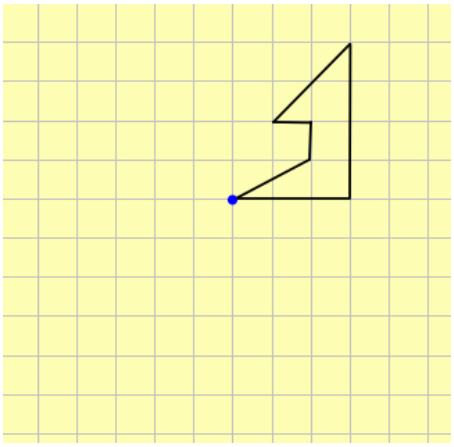
o) Complete this shape so that it has half-turn symmetry:



Rotational Symmetry

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p) Solve: $3x+4=19$ $8x+1=5x+10$

$9x+7=x-25$ $\frac{1}{3}x-2=4$.

Equations & Inequations

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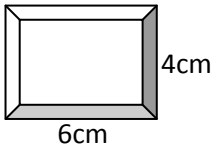
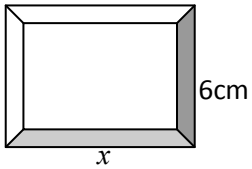
q) Work out the enlargement scale factor between these shapes:





Calculate x.

Ratio & Proportion

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r) A rectangle ABCD has coordinates A(3,2), B(8,2), C(3,-3) and D(8,-3). The rectangle is moved two units right and one unit down. Write down the coordinates of the new points. Label them A', B', C' and D'.

Transformation

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