# Algebra (angles) in shapes

111a

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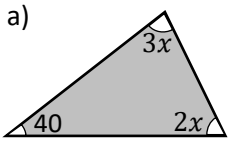
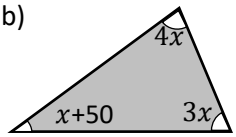
Name:

By forming an equation, calculate the value $x$:

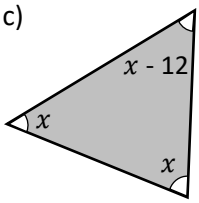
a)



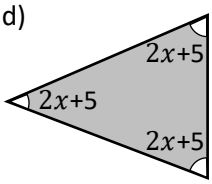

b)



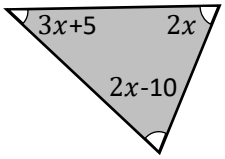

c)



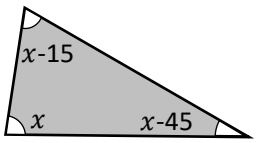

d)



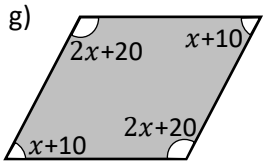

e)



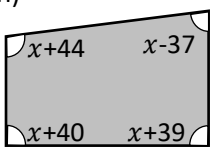

f)



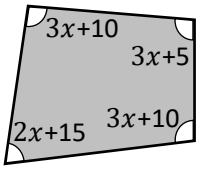

g)



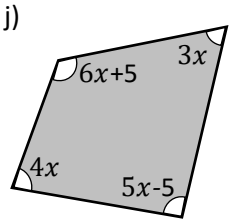

h)



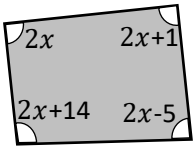

i)



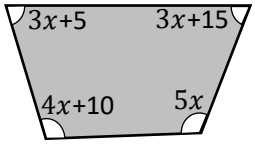

j)




i)




j)

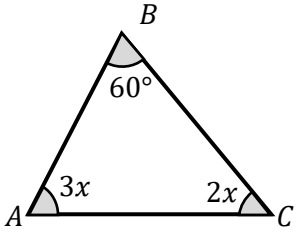



**Exam question:**

ABC is a triangle.

$\angle BAC = 3x$, $\angle BCA = 2x$ and $\angle ABC = 60°$.

Find the value of $x$.



# Algebra (perimeter) in shapes

111b

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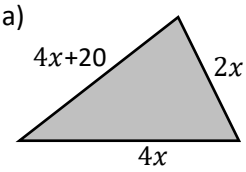
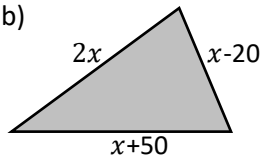
Name:

Write an algebraic expression for the perimeter of the following shapes:
Hence find the value of $x$ for the given perimeters

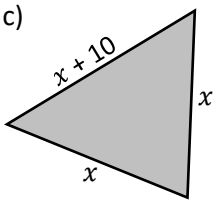
a) Perimeter = 200cm



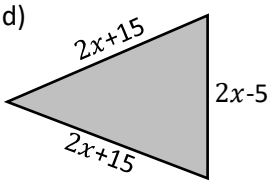

b) Perimeter = 110cm



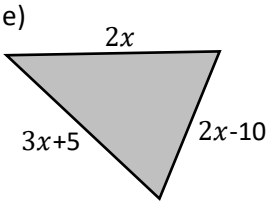

c) Perimeter = 190cm



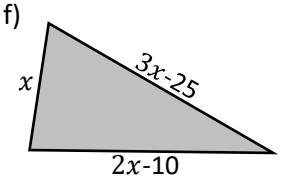

d) Perimeter = 385cm



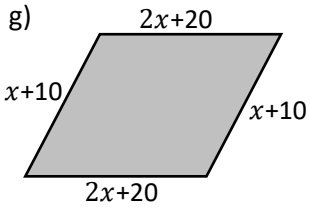

e) Perimeter = 275cm



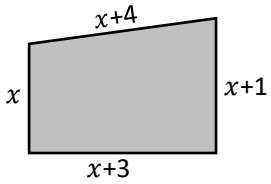

f) Perimeter = 115cm



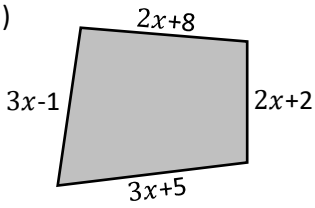

g) Perimeter = 78cm



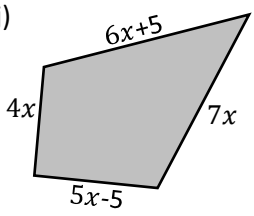

h) Perimeter = 40cm



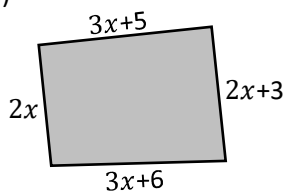

i) Perimeter = 84cm



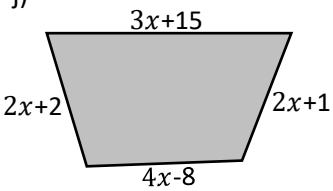

j) Perimeter = 88cm




i) Perimeter = 74cm




j) Perimeter = 230cm




**Exam question:**

ABC is a triangle.
The length of AB = $3x+2$, BC= $3x+5$ and AC = $3x+4$
If the perimeter is 83cm, work out the value of $x$