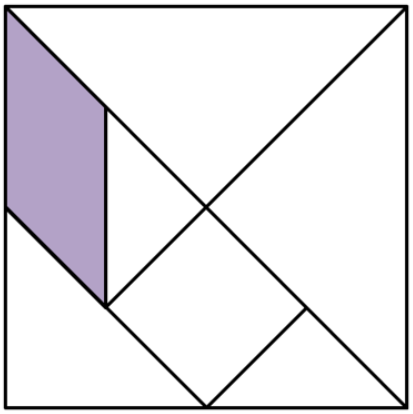
Problem of the Week: Week 4 (Sum2): Year 9: Geometry

- Calculate and solve problems involving the perimeters and areas of 2-D shapes including circles, areas of circles and composite shapes.
- Interpret mathematical relationships both algebraically and geometrically

Tangram Area

The seven pieces in this 12 cm by 12 cm square make a Tangram set. What is the area of the shaded parallelogram?



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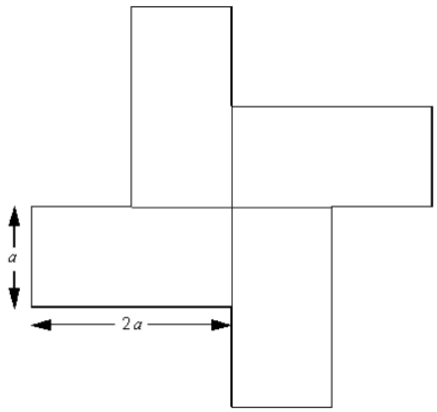
Shape

This shape is made of 4 congruent rectangles. Each rectangle has side lengths $2a$ and a

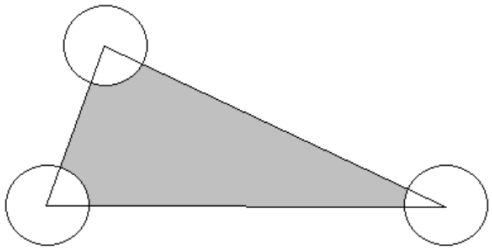


Not drawn accurately

The perimeter of the shape is 80cm. Work out the area of the shape.

Circle Corner

The diagram shows a triangle and three circles whose centres are at the vertices of the triangle. The area of the triangle is ***80cm²*** and each of the circles has a radius *2cm*. What is the area, in cm^2, of the shaded area?



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