



NOT TO SCALE

The diagram shows a triangle ABC . The arc BD is part of a circle with centre A and radius 6 cm .

The area of the sector ABD is 14.4 cm^2 .

(a) Show that angle BAD is 0.8 radians. [1]

The area of the triangle ABC is **three** times the area of the sector ABD .

(b) Find the length AC . [2]

(c) Find the perimeter of the region BCD . [5]