Marked example 2

Paper 1 style · No calculator

2 5 marks SL 3.4 ●○○ Routine

A sector of a circle has radius 10 cm and angle 1.2 radians.

(a) Find the length of the arc. [2]

(b) Find the perimeter of the sector. [1]

(c) Find the area of the sector. [2]

MARKSCHEME (a)

$l = 10 \times 1.2$ (M1)

12 cm A1

Total 2 marks

MARKSCHEME (b)

$10 + 10 + 12 = 32$ cm A1

Total 1 mark

Note The arc and the two radii.

MARKSCHEME (c)

$\frac{1}{2} \times 10^2 \times 1.2$ (M1)

60 cm^2 A1

Total 2 marks

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