4.11 Circles: Circumference and Area: 10-minute Pack

Calculators not allowed · about 10 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 A circular coaster has area 78.5 cm². A smaller circle is cut out from its centre with radius 2 cm. Find the area of the remaining ring, giving your answer to 1 decimal place. Use π = 3.14.

(3)

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2 A circular running track has circumference 157 m. Calculate the radius of the track in metres. Give your answer to 1 decimal place. Use π = 3.14.

(2)

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3 A circular table top has diameter 120 cm. Work out its area. Use π = 3.14.

(3)

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Mark scheme · 4.11 Circles: Circumference and Area: 10-minute Pack

Question 1

find area of small circle = $\pi \times 2^2 = 4\pi = 12.56$ cm²	M1
using $\pi = 3.14$	
subtract from total area: 78.5 - 12.56	M1
65.9 cm² cao	A1

Answer: **65.9 cm^2**

Question 2

use r = circumference / (2pi)	M1
25.0 m cao	A1

Answer: **25.0 m**

Question 3

radius 60	M1
3.14×60^2	M1
11304 cm² cao	A1

Answer: **11304 cm^2**

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