M1.(a)   Fully correct constructed circle drawn with radius [5.9, 6.1]

              B1 for any circle centre P (must be constructed and not freehand)

                        B2

     (b)   Sector drawn [58°, 62°] degrees

              B1 for any sector

                        B2
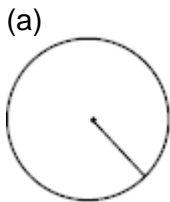
                        [4]

M2.(a)   radius

                        B1

     (b)   chord

                        B1

     (c)   tangent

                        B1

                        [3]

M3.

     (a)   Radius

                        B1

     (b)   Sector

                        B1

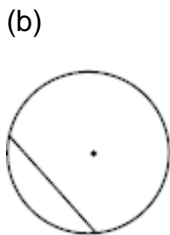   (c)   Diameter passes through the centre.

        Chord is smaller

Diameter cuts into equal (half) sections, Chord cuts into unequal sections

Ignore irrelevant statements, correct or otherwise.

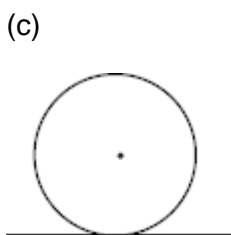*Any reference to diameter and/or chord must be correct or B0*

B1

[3]

M4.

(a)

B1

(b)

Allow diameter as special case of chord

B1

(c)

Allow radius to be drawn in too as long as it touches the tangent

B1

[3]

M5.

No

Yes

(Yes)

No

No

Yes

B1 For each correct part

B5

[5]

M6. *A* (4, 2)

If no marks awarded, award SC1 for a correct circle drawn with compasses passing through A, B, C and D

B1

B (8, 6)

B1

C (4, 10)

B1

D (0, 6)

B1

[4]

M7. (a)   [2.7, 2.9]

If answer in mm, accept [27mm, 29mm]
Ignore further working if answer seen, e.g calculating area or circumference

B1

(b)   [5.4, 5.8]

ft their (a) × 2

Ignore further working if answer seen, e.g calculating area or circumference

B1ft

(c)   *d* equals 2*r*

oe

or *r* equals $\frac{1}{2}$ *d*

Accept d = 2r
Do not accept d = r2

diameter equals twice radius

radius is half the diameter

B1
[3]