Practice worksheet | Geometry and proof

Chords, radii and tangents

Name: _____ Date: _____

6 questions | 13 marks

1. A radius 13 cm circle has chord length 10 cm. Find the perpendicular distance from centre to chord. [2 marks]

2. A chord is 12 cm long and 3 cm from the centre. Find the radius. [2 marks]

3. A tangent from P has length 15 cm and the radius to its contact point is 8 cm. Find the centre-to-P distance. [2 marks]

4. Tangents PA and PB from P have lengths $2x+1$ and $3x-4$. Find x and the common tangent length. [2 marks]

5. A radius 10 cm circle has a chord 16 cm long. A student uses 10^2-16^2. Explain the error and give the correct distance. [3 marks]

6. A line joins the circle centre to the midpoint of a non-diameter chord. What angle does it make with the chord? [2 marks]