Practice worksheet | Proof and circle geometry

Angle properties of circles

Name: _____ Date: _____

6 questions | 14 marks

1. An inscribed angle subtends the same arc as a central angle of 146°. Find it. [2 marks]

2. An inscribed angle is 48°. Find the central angle on its intercepted arc. [2 marks]

3. P and Q lie on the same segment of chord AB. If $\angle APB = 57^\circ$, find $\angle AQB$. [2 marks]

4. AB is a diameter. In triangle APB, angle PAB is 31°. Find angle PBA. [2 marks]

5. The major arc AB has central reflex angle 248°. P lies on the minor arc AB. Find angle APB. [3 marks]

6. Explain why two angles subtending chord AB from opposite segments sum to 180°. [3 marks]