

Worksheet: Equation of a Tangent



Q1: Suppose that \overline{AB} is a diameter of a circle centre $(-7, 4)$. If $B(-8, 6)$, what is the general equation of the tangent to the circle at A ?

- A $x + 2y - 10 = 0$
- B $2x - y - 10 = 0$
- C $x - 2y + 10 = 0$
- D $x + 2y + 10 = 0$



Question Video

Q2: Suppose that \overline{AB} is a diameter of a circle centre $(5, -4)$. If $B(6, 0)$, what is the general equation of the tangent to the circle at A ?

- A $x - 4y - 28 = 0$
- B $4x + y + 28 = 0$
- C $x + 4y + 28 = 0$
- D $x - 4y + 28 = 0$



Question Video

Q3: Given that \overline{CD} is a diameter of the circle M , and the coordinates of the points M and D are $\left(-\frac{11}{2}, -1\right)$ and $(-7, 7)$ respectively, determine the equation of the tangent to the circle at the point C .

A $y = -\frac{16}{3}x - \frac{39}{4}$

B $y = \frac{3}{16}x - \frac{33}{4}$

C $y = \frac{3}{16}x - \frac{39}{4}$

D $y = -\frac{16}{3}x - \frac{33}{4}$