Practice worksheet | Functions and straight-line graphs

Circles and other simple relations

Name: _____ Date: _____

6 questions | 12 marks

1. State the centre and radius of $(x-4)^2+(y+1)^2=9$. [2 marks]

2. Write the equation of a circle centred at (-2,3) with radius 5. [2 marks]

3. Does (3,4) lie on $x^2+y^2=25$? Explain. [2 marks]

4. Find the x-intercepts of $(x-1)^2+y^2=9$. [2 marks]

5. Write the lower semicircle of $x^2+y^2=16$, including domain and range. [2 marks]

6. A circular sprinkler reaches 6 m from a nozzle at (2,1) on a metre grid. Give its boundary equation and decide whether (7,4) lies inside. [2 marks]