## Fill in the Blanks

Radius and Diameter of a Circle
Each circle has a diameter $A B$, a centre $C$ and a radius $r$

| Point A | Point B | Gradient <br> of AB | Equation <br> of AB | Centre <br> $\mathbf{C}$ | Radius <br> $\mathbf{r}$ | Equation of Circle |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $(3,4)$ | $(-3,-4)$ |  |  |  | 5 | $x^{2}+y^{2}=25$ |
| $(0,5)$ | $(6,-3)$ |  |  | $(2,-1)$ |  |  |
| $(4,0)$ |  |  |  | $(4,2)$ |  |  |
|  |  |  |  |  |  |  |
| $(-12,4)$ |  | 1 |  |  |  |  |
|  |  |  | $y=3 x-17$ | $(4,-5)$ | $\sqrt{10}$ |  |
|  |  |  | $y=\frac{3}{4} x-\frac{9}{4}$ |  | $\sqrt{2}$ |  |
|  |  |  |  |  | $(x+1)^{2}+(y+3)^{2}=100$ |  |

