

Fill in the Blanks

Radius and Diameter of a Circle

Each circle has a diameter AB , a centre C and a radius r

Point A	Point B	Gradient of AB	Equation of AB	Centre C	Radius r	Equation of Circle
(3, 4)	(-3, -4)	$\frac{4}{3}$	$y = \frac{4}{3}x$	(0, 0)	5	$x^2 + y^2 = 25$
(0, 5)	(6, -3)	$-\frac{4}{3}$	$y = -\frac{4}{3}x + 5$	(3, 1)	5	$(x - 3)^2 + (y - 1)^2 = 25$
(4, 0)	(0, -2)	$\frac{1}{2}$	$y = \frac{1}{2}x - 2$	(2, -1)	$\sqrt{5}$	$(x - 2)^2 + (y + 1)^2 = 5$
(6, 6)	(2, -2)	2	$y = 2x - 6$	(4, 2)	$2\sqrt{5}$	$(x - 4)^2 + (y - 2)^2 = 20$
(-12, 4)	(-6, -4)	$-\frac{4}{3}$	$y = -\frac{4}{3}x - 12$	(-9, 0)	5	$(x + 9)^2 + y^2 = 25$
(0, 0)	(0, -2)	1	$y = x - 2$	(1, -1)	$\sqrt{2}$	$(x - 1)^2 + (y + 1)^2 = 2$
(5, -2)	(3, -8)	3	$y = 3x - 17$	(4, -5)	$\sqrt{10}$	$(x - 4)^2 + (y + 5)^2 = 10$
(-9, -9)	(7, 3)	$\frac{3}{4}$	$y = \frac{3}{4}x - \frac{9}{4}$	(-1, -3)	10	$(x + 1)^2 + (y + 3)^2 = 100$