

# Revision Booklet 2

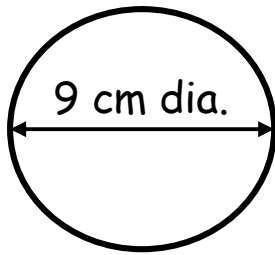
## Topics

1. Circumference of a Circle
2. Area of a Circle
3. Area of a Sector and Annulus
4. 3-D Shapes
5. Linear Equations
6. Time Series
7. Brackets
8. Circle Theorems

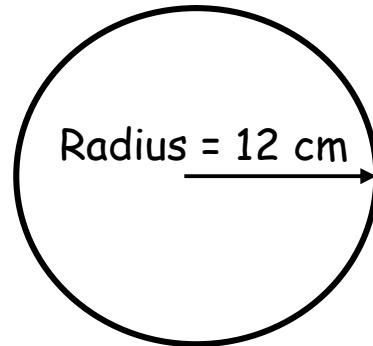
Name \_\_\_\_\_

1. Calculate the circumference and area of each of these circles:

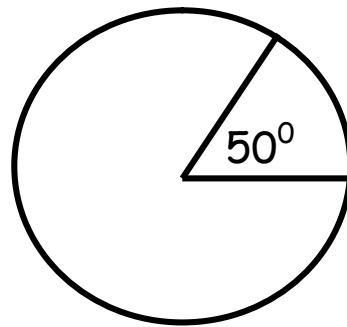
a.



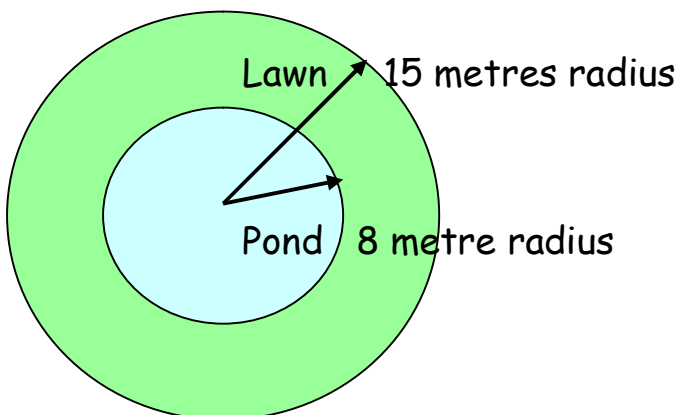
b.



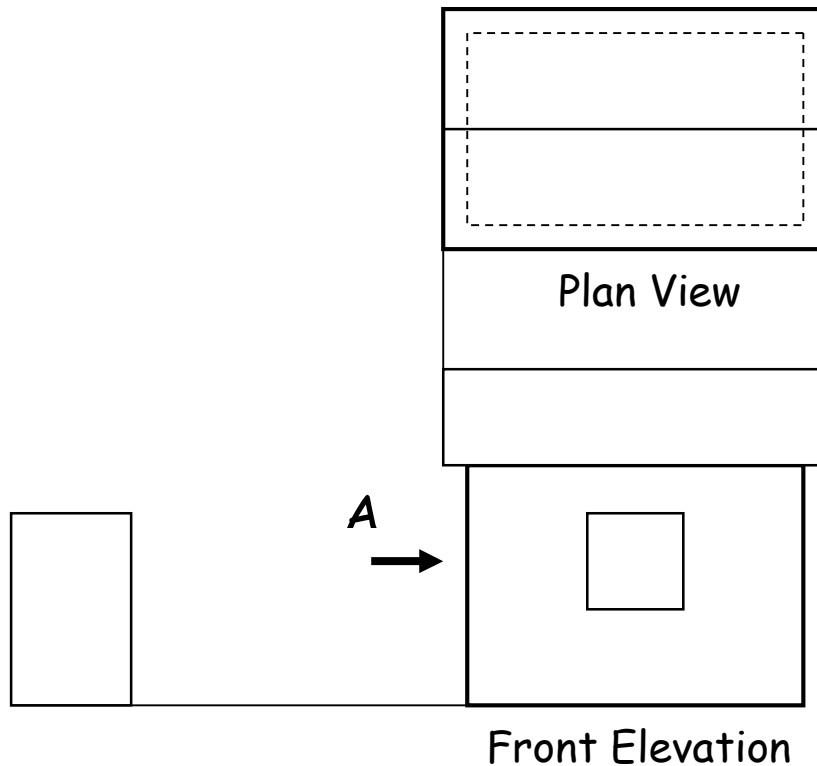
2. A sector with an angle of  $50^\circ$  is cut from a circle with a diameter of 15 cm. Calculate the area and arc length of this sector.



3. A circular lawn has a circular pond in its centre as shown. Calculate the area of the lawn.



4.



Complete the end elevation view on arrow A for the above orthographic drawing of the shed.

6. Solve these equations

a.  $4t = 12$

b.  $r/4 = 5$

c.  $3p = -15$

d.  $5x - 12 = 8$

e.  $3f + 16 = 36$

f.  $4r - 8 = 36$

g.  $5f + 7 = 23$

h.  $26 - 4x = 14$

i.  $3x + 4 = 2x + 11$

j.  $4x - 7 = 12 + 3x$

k.  $5x - 2 = 3x + 18$

l.  $3x - 2 = 18 - 2x$

m.  $7 - 5y = y - 11$

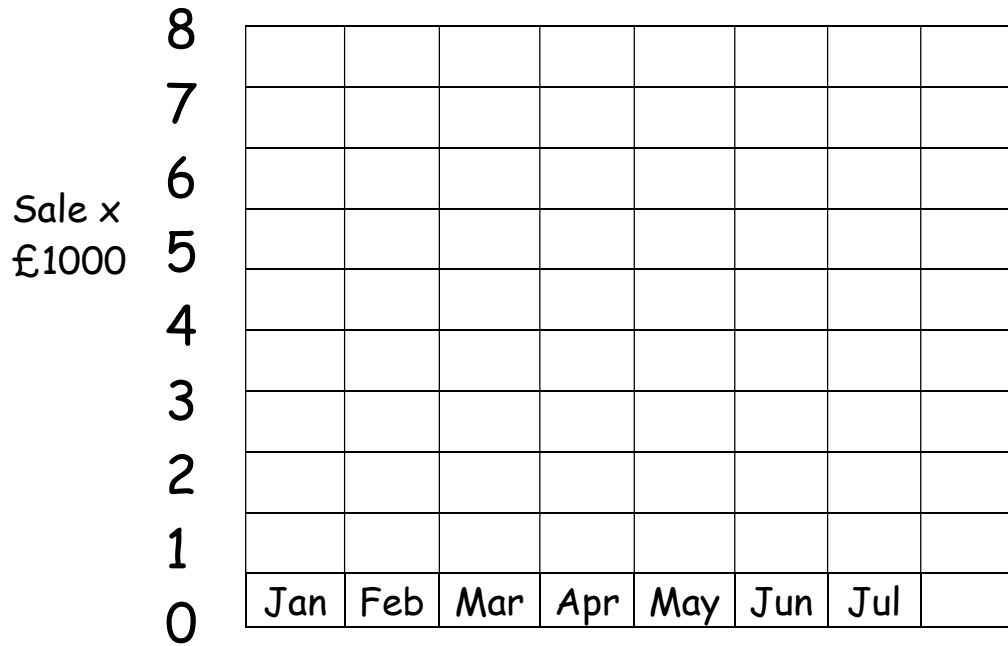
n.  $6w + 5 = 3w - 1$

o.  $p/2 + 4 = 5$

p.  $r/2 - 1 = r/3 + 4$

7. The money taken each month by a shop is shown in the table. Plot these on the graph and then calculate and plot the quarterly moving average.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul
Sale x £1000	7	5	2	6	4	5	8



9. Multiply out the brackets and then, when necessary, simplify the expression.

a.	$4(x + 3)$	f.	$3 - 4(3x + y)$
b.	$5(2x - 6)$	g.	$(2x + 3)(2y + 4)$
c.	$t(t + 3)$	h.	$(3x - 2)(x + 4)$
d.	$y(3y + 4q)$	i.	$(5x - 5)(2x - 3)$
e.	$2r(r + yr^2)$	j.	$(x - 2)(5 - x)$

10. Calculate the unknown angles. Both the shapes are circles and point  $C$  is the centre of the circle.

