JCOL Basic Skills – Pack 4

Topics

Functions and Graphs – Can I draw the graph a linear function?

1 ▶ 2018 JCOL Paper 1 – Question 14 (a)   ☐

Coordinate Geometry – Can I calculate the midpoint?

2 ▶ 2012 JCOL Paper 2 – Question 5 (b)   ☐

Algebra – Can I express the sum of 2 algebraic fractions as a single fraction?

3 ▶ 2015 JCOL Sample Paper 1 – Question 11 (a)   ☐

Statistics – Can I complete a stem and leaf diagram?

4 ▶ 2017 JCOL Paper 2 – Question 5 (a) (i)   ☐

Area, Perimeter and Volume – Can I find the area and circumference of circles?

5 ▶ 2019 JCOL Paper 2 – Question 2 (c)   ☐

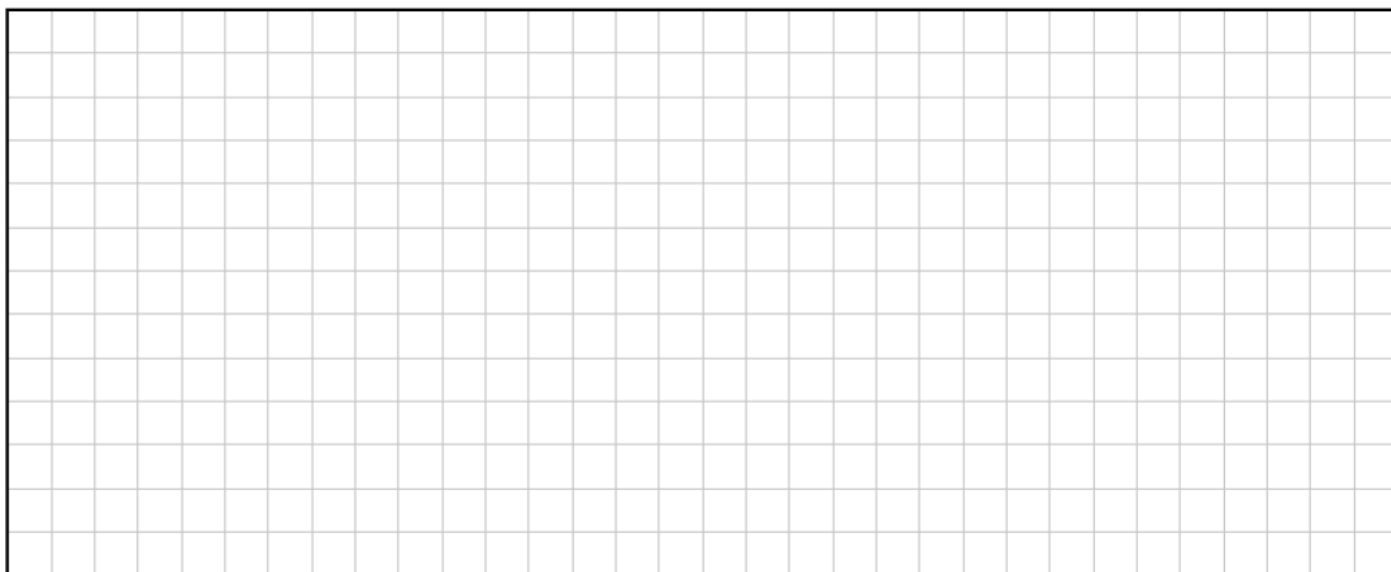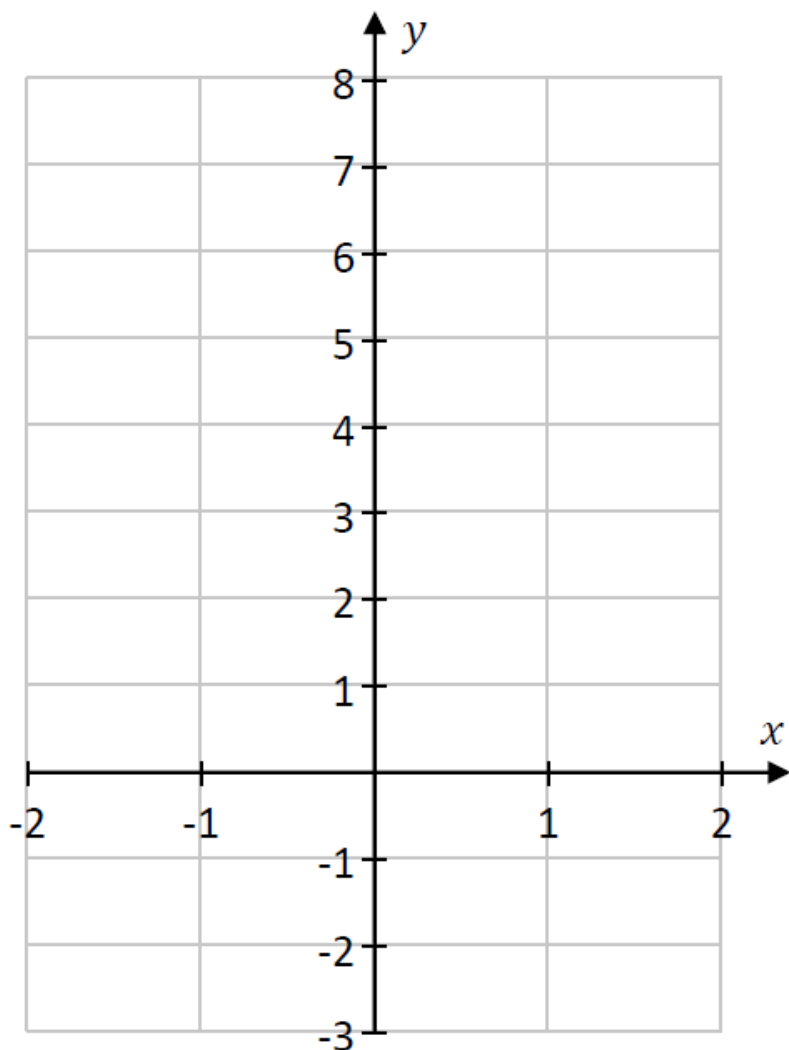www.mathspoints.ie for **worked solutions** to these questions.

🗀 JCOL Resources by Topic

🗀 JCOL Revision – 50 Common Questions

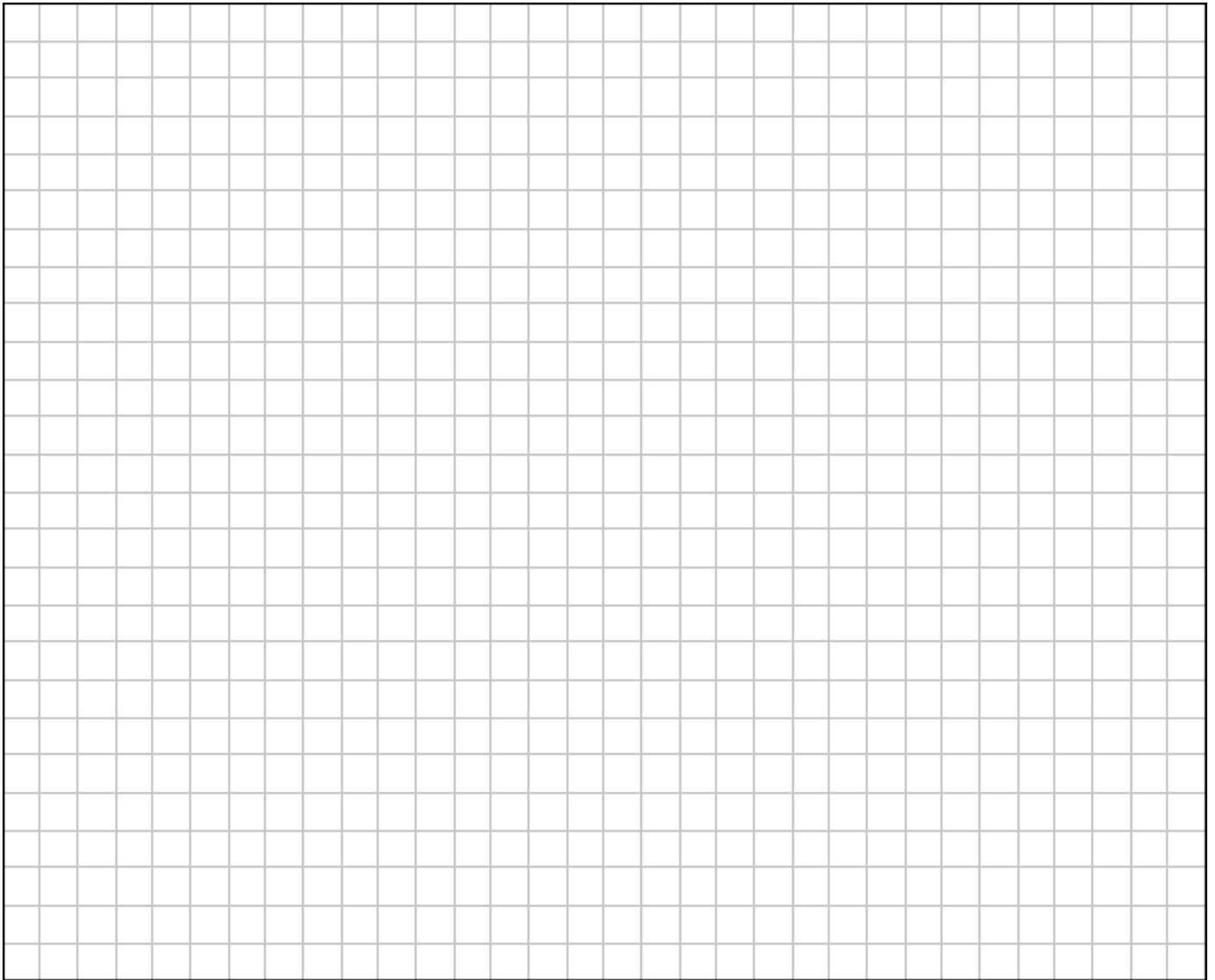**Draw** the graph of the following function in the domain $-2 \leq x \leq 2$, for $x \in \mathbb{R}$.

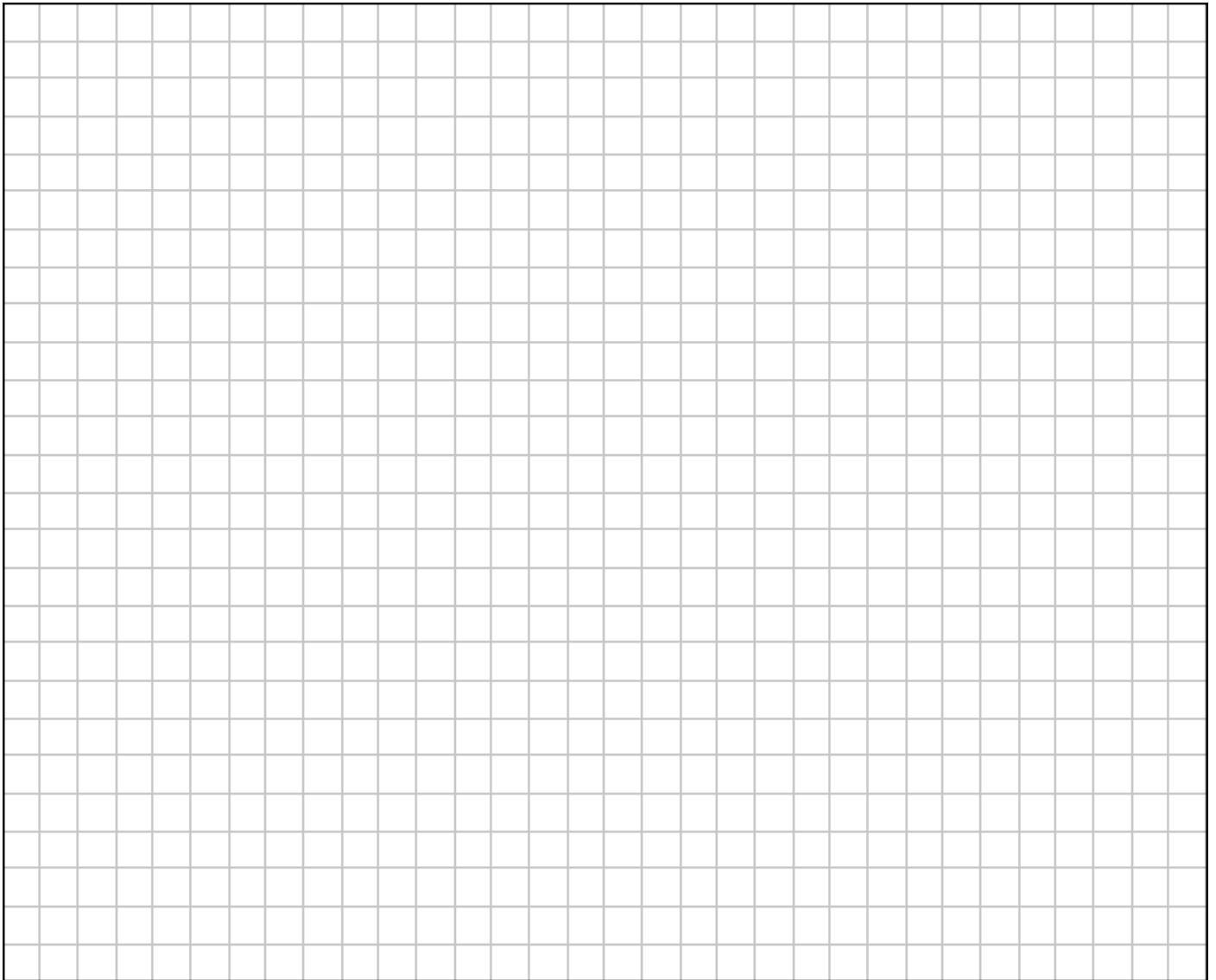$$y = 2x + 3$$

2 ▶ 2012 JCOL Paper 2 – Question 5 (b)

R is the point $(-1,\ 2)$ and S is the point $(5,\ 6)$.

Find the midpoint of $[RS]$

3 ▶ 2015 JCOL Sample Paper 1 – Question 11 (a)

Express $\frac{2x+1}{3} + \frac{3x-5}{2}$ as a single fraction. Give your answer in its simplest form.

There are 15 boxers in a boxing club. The weight of each boxer (in kg) is shown in the table below.

47	49	49	50	56
57	58	65	67	68
69	69	69	75	79

Complete the stem and leaf diagram below to show this data.

4							
5							
6							
7							

Key: | 5 | 6 | = | |
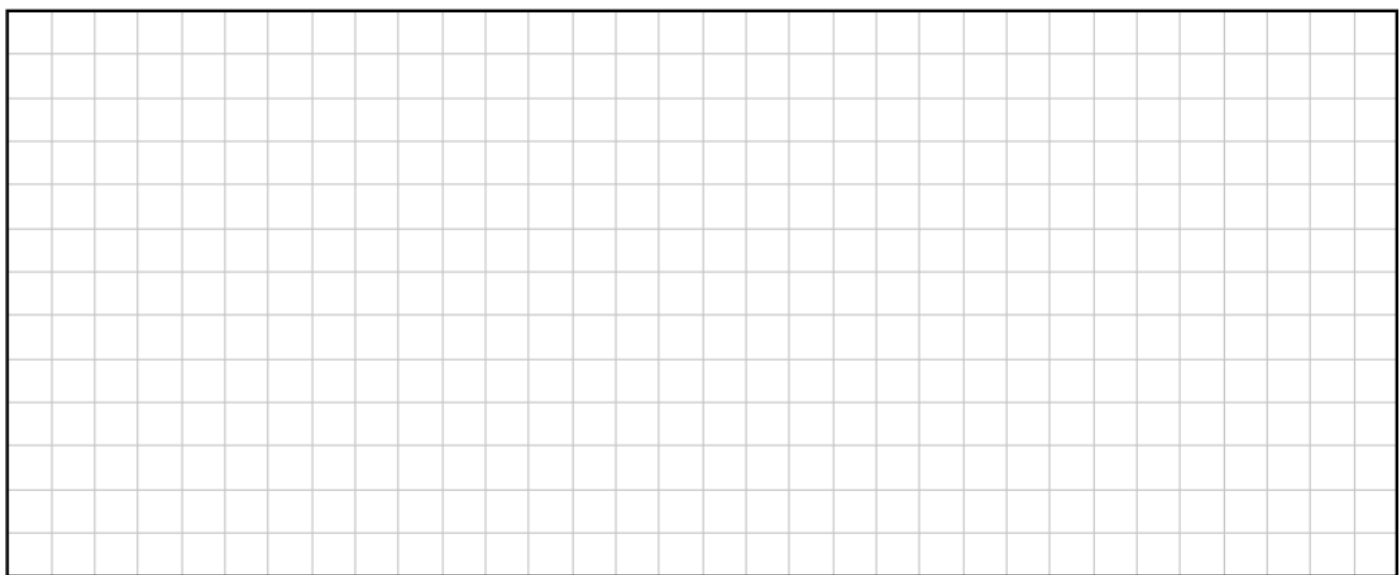
5 ▶ 2019 JCOL Paper 2 – Question 2 (c)

Work out the **area** of the circle k.

Give your answer in cm^2, correct to one decimal place.