LCOL Basic Skills – Pack 1

Topics

Algebra – Can I solve a quadratic equation using the formula?

Last Needed - 2023

1 ▶ 2008 LCOL Paper 1 – Question 2 (b) ☐

Applied Arithmetic – Can I calculate compound interest?

Last Needed - 2023

2 ▶ 2011 LCOL Paper 1 – Question 2 ☐

Number – Can I work with scientific notation?

Last Needed - 2022

3 ▶ 2007 JCHL Paper 1 – Question 1 (b) (i) ☐

Trigonometry – Can I use the sine rule to find the missing side of a triangle?

Last Needed - 2023

4 ▶ 2011 LCOL Paper 2 – Question 5 (a) ☐

Coordinate Geometry – Can I find the equation of a line given 2 points on the line?

Last Needed - 2023

5 ▶ 2009 LCOL Paper 2 – Question 2 (a) ☐

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

LCOL Resources by Topic

LCOL Revision – 50 Common Questions

1 ▶ 2008 LCOL Paper 1 – Question 2 (b)

Solve $x^2 - 4x + 1 = 0$.

Write your solutions in the form $a \pm \sqrt{b}$, where $a, b \in$ **N.**

2 ▶ 2011 LCOL Paper 1 – Question 2

(a) A certain deposit account will earn 3% interest in the first year and 6% interest in the second year. The interest is added to the account at the end of each year. If a person invests €20 000 in this account, how much will they have in the account at the end of the two years?

(b) Show that, to the nearest euro, the same amount of interest is earned by investing the money for two years in an account that pays compound interest at 4·49% (AER).

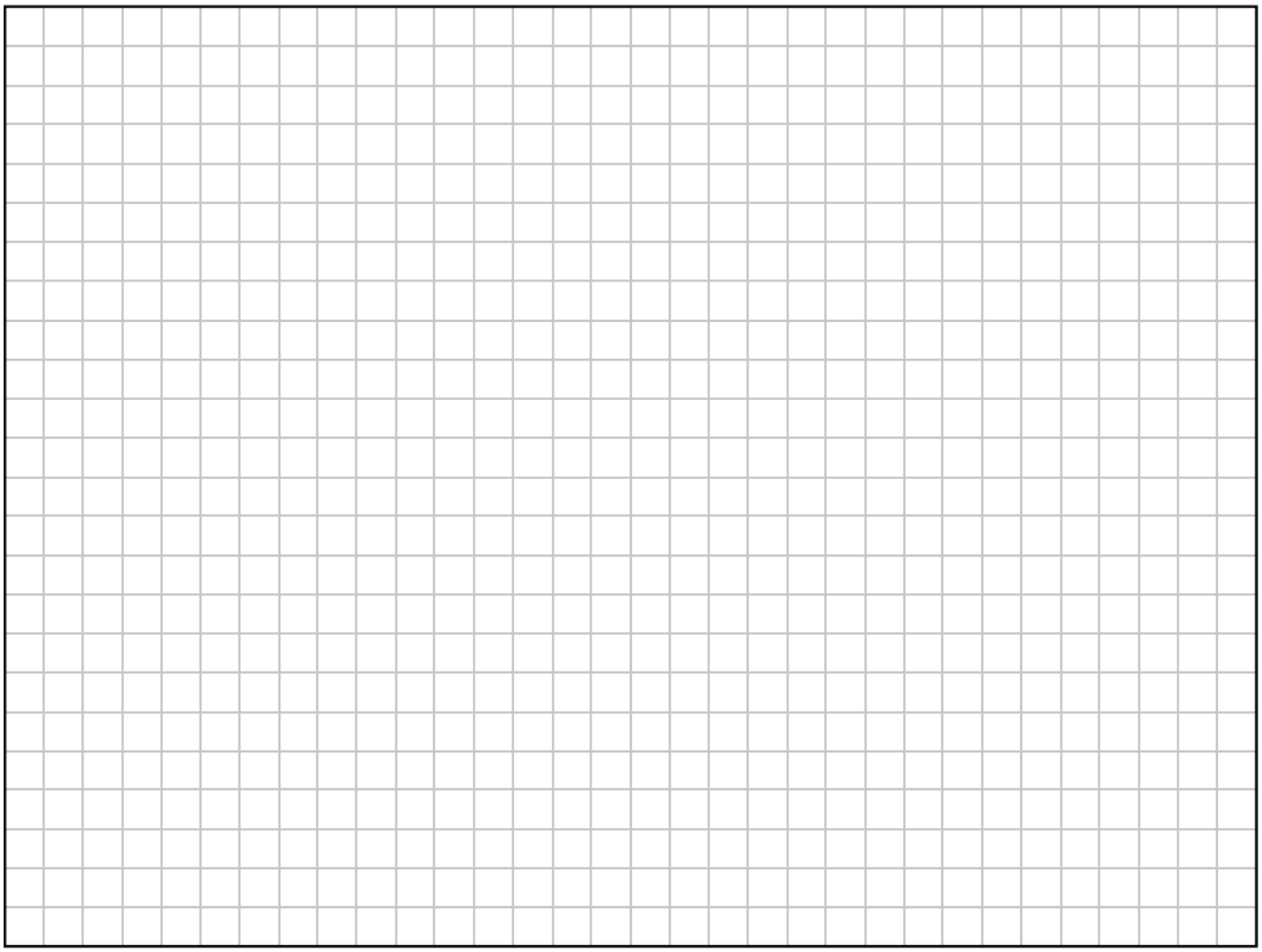
3 ▶ 2007 JCHL Paper 1 – Question 1 (b) (i)

In 1981 the population of Peru was approximately 1.8×10^7.

By 1988 the population had increased by 2.5 million.

What would be the approximate population of Peru in 1988?

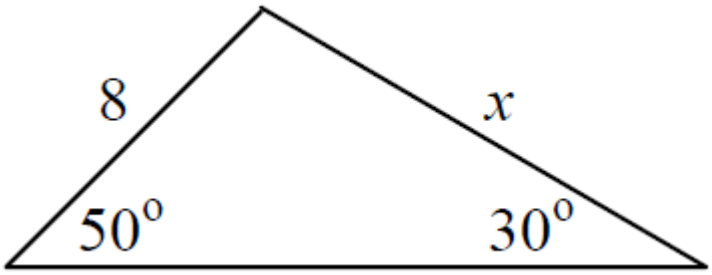
Express your answer in the form $a \times 10^n$, where $n \in \boldsymbol{Z}$ and $1 \leq a < 10$.



4 ▶ 2011 LCOL Paper 2 – Question 5 (a)

Use the sine rule to calculate the value of x in the diagram.

Give your answer correct to the nearest integer.



5 ▶ 2009 LCOL Paper 2 – Question 2 (a)

$a(-2,\ 1)$ and $b(4,\ 5)$ are two points.

Find the equation of ab.