

Friday 27th November 2020

O LO: Can I use symbols to write simple formulae?

Use the examples at the top of this question sheet to help you write formulae for the rest of the questions.

I can use symbols to write a formula.

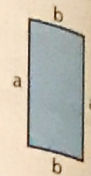
Examples

Write a formula for:

- 1 the number of days (d) in w weeks
Answer $d = 7w$

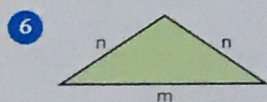
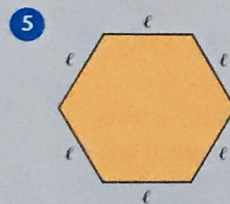
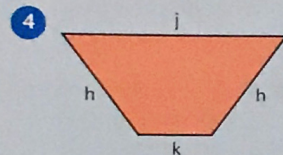
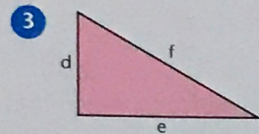
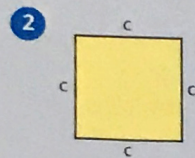
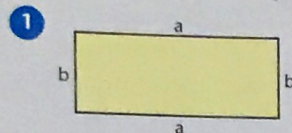
- 2 the n th term of this sequence
1 3 5 7 9
 n th term = $2n - 1$

- 3 the perimeter (p) of this rectangle.
Answer $p = 2a + 2b$



A

Write a formula for the perimeter (p) of each shape.



B

Write a formula for the number of

- glasses g in y bottles if one bottle holds 8 glasses
- fish f needed to feed s seals if each seal eats 6 fish
- wheels w on b bicycles
- months m in y years
- minutes m in h hours
- legs ℓ on s spiders and a ants
- sides s in p pentagons
- vertices v in h hexagonal prisms.

Find the cost of:

- 10 pens at x pence each
- y sweets at 20 pence each
- 4 books at $\pounds x$ each
- d dollars at $\pounds 0.6$ each.

C

Draw and label the shape whose perimeter is given by each formula.

- a triangle
 $p = 3a$
- an irregular pentagon
 $p = 3a + 2c$
- a quadrilateral
 $p = 3d + e$
- an irregular hexagon
 $p = 3f + 2g + h$

Write a formula for the n th term of each sequence.

- 2, 4, 6, 8, 10
- 3, 6, 9, 12, 15
- 3, -2, -1, 0, 1
- 1, 4, 9, 16, 25
- 3, 5, 7, 9, 11
- 2, 5, 8, 11, 14

- 11 A car has x litres of petrol in its tank. One half is used on Monday. A further 2 litres on Tuesday. How much petrol is left?