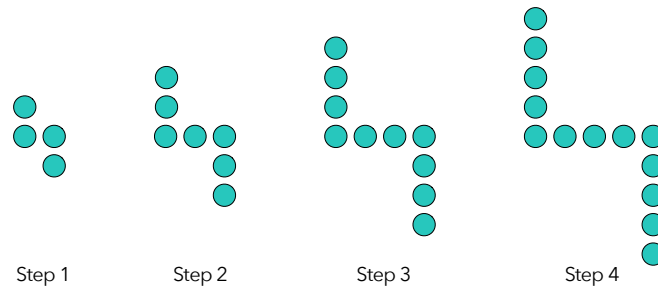


1

Graph the linear relationship

$$y = 40x + 200$$

2



Write an equation for the number of dots in Step  $n$ .

3

Would you rather:



OR



a stack from the floor  
to the top of your head

4

What different quantities  
could we measure  
about mobile phones?

5

Line A:  $(\square, \square), (\square, \square)$

Line B:  $(\square, \square), (\square, \square)$

Using eight different integers from 1 to 9, fill in the boxes so that:

- Line A has a slope of 4, and
- Line B is parallel to Line A.

6

Pick any number you want.  
Multiply it by 40 and add 200.

What questions could we  
ask about all of our numbers?

7

Camille went to the store to buy eggs, milk, and cheese. Eggs cost \$3.50, milk costs \$2.00 and cheese costs \$4.00. How much money did Camille need?

8



Electric scooter rental Company A charges a \$6.00 per week subscription fee plus 38 cents a minute that you're on the scooter. Company B charges a subscription fee of only \$5.00 per week, but they charge you 42 cents per minute of use.

How much time per week would you need to use the scooter before subscribing to Company A would save you money?

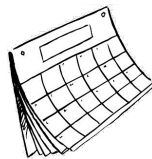
9

Which is the bigger area: a 3 metre square or an equilateral triangle in which each side is 4 metres long?

10

A palindrome day happens when the day's date can be read the same way backwards and forwards.

Today's date (24 May 2022) can be written in DDMMYY format as 240522. Today is not a palindrome day, sadly.



How many days in the 21st century are palindrome days?

What about other date formats?

11

1. Collect measurements of the height and arm span of each student in the class.
2. Present your data in a visual display.
3. Scientists suggest our height and arm span are the same. Based on the data you collected, do you agree or disagree with this statement? Give reasons for your choice.

12

This net will make a box. Where could you add another square onto the net so that when you fold it up you will get a box with a lid?

Find as many nets as you can which will fold into a box with a lid.

