#### Mathematics

# Forming quadratic equations I





### Try this

I think of a positive integer.
I add 7, then multiply by 5.
I then subtract 1, my answer is 54.
What was my number?

I think of a positive integer.
I square my number.
I then subtract 1, my answer is 48.
What was my number?



### Independent task

- 1) Write an equation to represent each question.
- a) I think of a positive integer. I multiply by 6, then add 11. My answer is 27.
- b) I think of a positive integer. I square it, then times it by two. My answer is 27.
- c) I think of a positive integer. I multiply it by 2, then I square it. My answer is 27.
- d) I think of a positive integer. I multiply it by 7, then I add 3. I then divide it by 2. My answer is 27.



### Independent task

- 1) Write an equation to represent each question.
- e) I think of a positive integer. I square it, then I add 3. I then divide it by 2. My answer is 27.
- f) I think of a positive integer. I multiply it by 3 more than itself, I then add 15. My answer is 27.
- 2) Which of your equations are not quadratics?



## **Explore**

Make up three quadratic equation 'I think of a number' problems.

Make one easy, one medium and one hard.

