

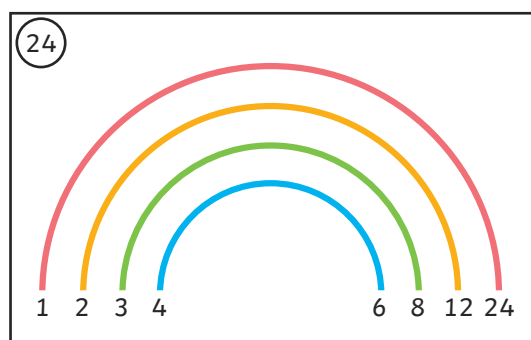
- 1) Sort these numbers into the correct columns. Remember: they might be factors of more than one number.



2, 5, 8, 12, 4, 10, 9, 3

Factors of 12	Factors of 40	Factors of 36	Factors of 24

- 2) Look at the table from question 1. Which factors are still missing for each number?
Draw factor rainbows, like the example, to help you identify missing factors and then add them to the table below.



Factors of 12	Factors of 40	Factors of 36	Factors of 24

- 3) Tatsiana wants to use a systematic way to identify factors to make sure she doesn't miss any. Can you show a systematic way of identifying all the factors of 48? You could use a factor rainbow or a different method.



- 1) Alfie is identifying the factors of 36. He says 20 is factor of 36. Can you explain what mistake he has made?

- 2) Are these statements true or false? Explain your thinking.

- a) Factors come in pairs so all numbers have an even number of factors.

- b) 48 has more factors than any other number below 100.

- c) Larger numbers have more factors.

- 1) Rebecca says, "This year, my sister's age is a factor of 36. Next year, her age will be a factor of 30." How old could she be?



- 2) Rafael says,

"I am thinking of 3 consecutive numbers less than 100. The first number has 5 as one of its factors, the second number has 1 as a factor and the third number has 2 as one of its factors."



- a) What could the three consecutive numbers be? Can you find all possible sets of numbers?

Can you explain how you solved the problem?
