

Introduction

What would the 20th shape in the pattern be?



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A circle

Varied Fluency 1

Tick the statements which are correct.



For every triangle and 2 circles, there are 3 squares.

For every triangle there are 2 squares.

For every 2 circles there will be 1 triangle.

Varied Fluency 1

Tick the statements which are correct.



For every triangle and 2 circles, there are 3 squares. ✓

For every triangle there are 2 squares.

For every 2 circles there is 1 triangle. ✓

Varied Fluency 2

True or false?



For every triangle there are 2 circles.

Varied Fluency 2

True or false?

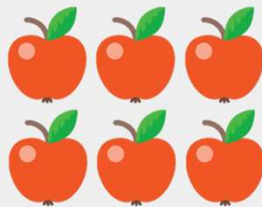


For every triangle there are 2 circles.

True

Varied Fluency 3

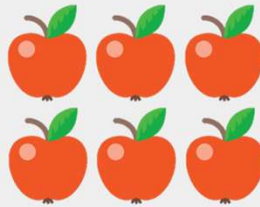
Complete the sentence.



There are 6 _____ for every 5 _____ .

Varied Fluency 3

Complete the sentence.

There are 6 apples for every 5 oranges .

Varied Fluency 4

Fill in the missing numbers.

There are 2 triangles for every 8 squares.



If there is 1 , there will be .

Varied Fluency 4

Fill in the missing numbers.

There are 2 triangles for every 8 squares.



If there is 1 , there will be .

Reasoning 1

Becky has different coloured counters.

There are 2 blue counters for every 8 green counters.

Becky says,



If there were just 1 blue counter, there would be 6 counters in total.

Is she correct? Explain how you know.

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Is she correct? Explain how you know.

Becky is incorrect because...

Reasoning 1

Becky has different coloured counters.

There are 2 blue counters for every 8 green counters.

Becky says,



If there were just 1 blue counter, there would be 6 counters in total.

Is she correct? Explain how you know.

Becky is incorrect because if there was 1 blue counter, there would be 4 green counters. $1 + 4 = 5$.

Problem Solving 1

Eesa has a bag of shopping containing strawberries and oranges.

There are 12 pieces of fruit altogether.



Write 3 different sentences which explain the possible ratios of the fruit.

Problem Solving 1

Eesa has a bag of shopping containing strawberries and oranges.

There are 12 pieces of fruit altogether.



Write 3 different sentences which explain the possible ratios of the fruit.

Various answers that add up to 12, for example:

1 and 11; 2 and 10; 3 and 9

Reasoning 2

Harrison and Tobias are looking at the relationship between strawberries and lemons.



Harrison thinks that if there was one strawberry, there would be 2 lemons.

Tobias thinks that if there was 1 strawberry, there would be 3 lemons.

Who is correct? Explain how you know.

Reasoning 2

Harrison and Tobias are looking at the relationship between strawberries and lemons.



Harrison thinks that if there was one strawberry, there would be 2 lemons.

Tobias thinks that if there was 1 strawberry, there would be 3 lemons.

Who is correct? Explain how you know.

Tobias is correct because...

Reasoning 2

Harrison and Tobias are looking at the relationship between strawberries and lemons.



Harrison thinks that if there was one strawberry, there would be 2 lemons.

Tobias thinks that if there was 1 strawberry, there would be 3 lemons.

Who is correct? Explain how you know.

Tobias is correct because there are 3 strawberries for every 9 lemons, so if there were 1 strawberry, there would be 3 lemons.