

# Step 6: Pie Charts with Percentages

## Introduction

Calculate these percentages of quantities.

**Find 25% of:**

<b>60</b>	<b>84</b>	<b>56</b>	<b>168</b>
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**Find 10% of:**

<b>70</b>	<b>150</b>	<b>690</b>	<b>125</b>
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**Find 5% of:**

<b>20</b>	<b>140</b>	<b>280</b>	<b>360</b>
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## Introduction

Calculate these percentages of quantities.

**Find 25% of:**

<b>60</b> <b>15</b>	<b>84</b> <b>21</b>	<b>56</b> <b>14</b>	<b>168</b> <b>42</b>
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**Find 10% of:**

<b>70</b> <b>7</b>	<b>150</b> <b>15</b>	<b>690</b> <b>69</b>	<b>125</b> <b>12.5</b>
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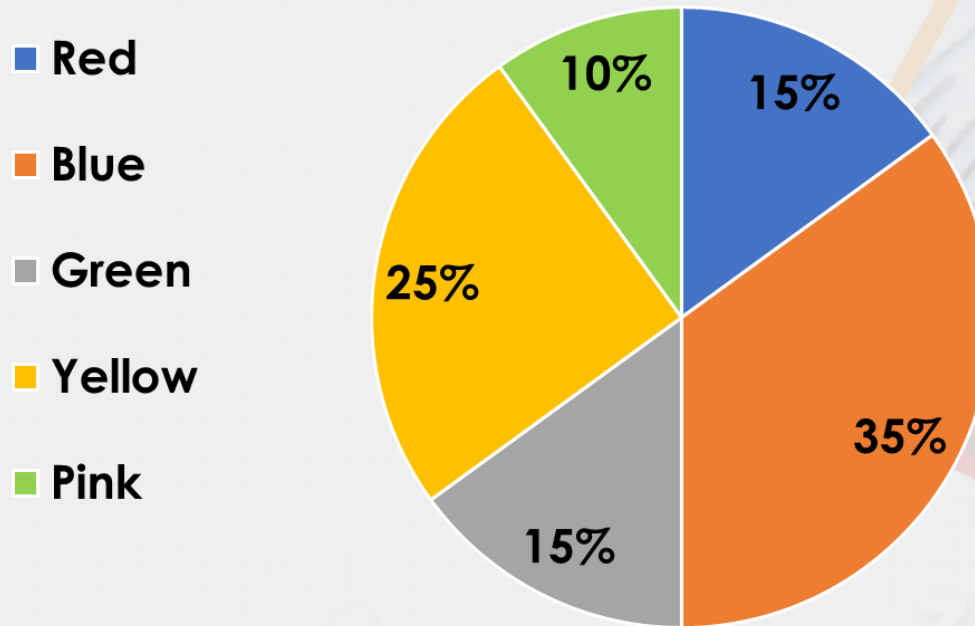
**Find 5% of:**

<b>20</b> <b>1</b>	<b>140</b> <b>7</b>	<b>280</b> <b>14</b>	<b>360</b> <b>18</b>
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## Varied Fluency 1

**60 children voted for their favourite colour.  
Here are the results:**

### Favourite Colour



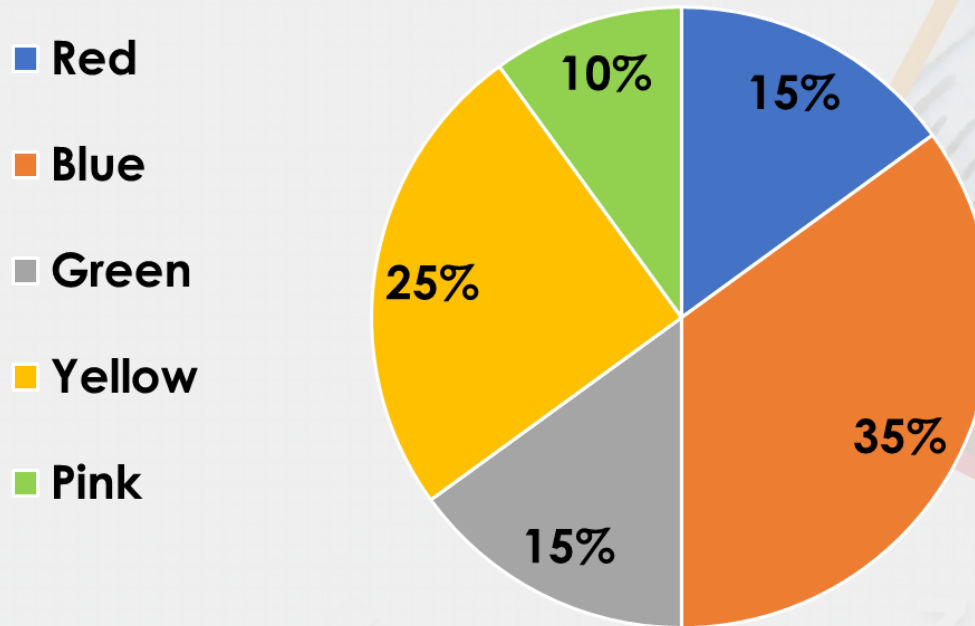
**How many voted for red?**



## Varied Fluency 1

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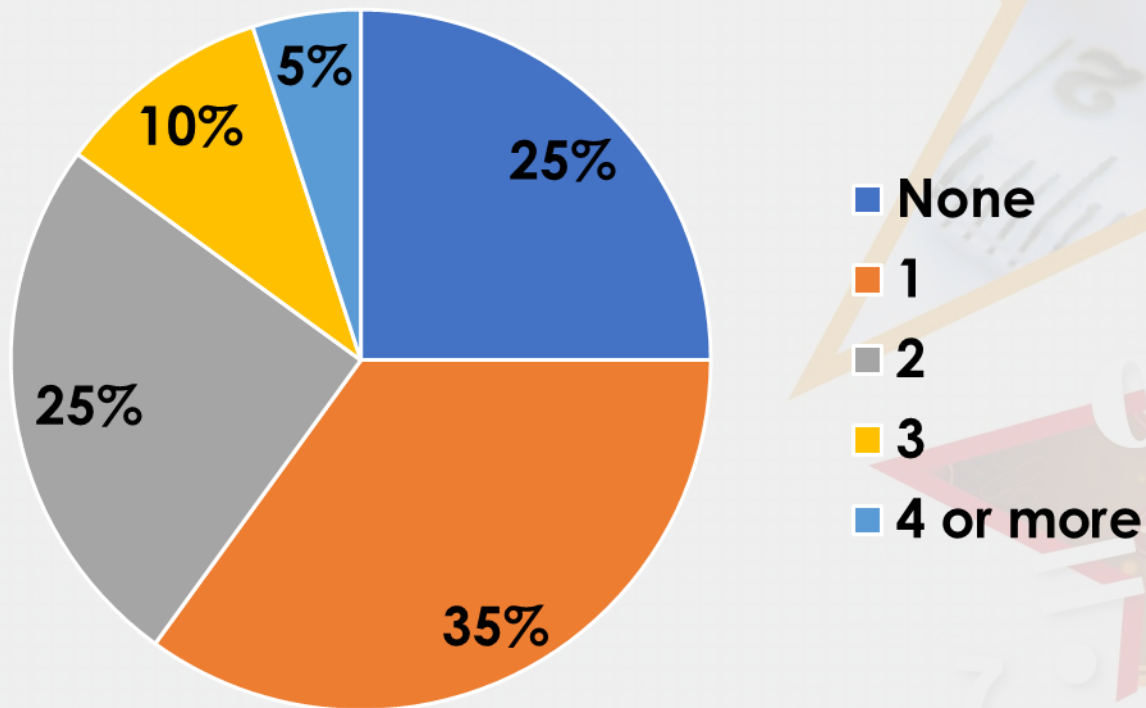


**How many voted for red?**

**9**

## Varied Fluency 2

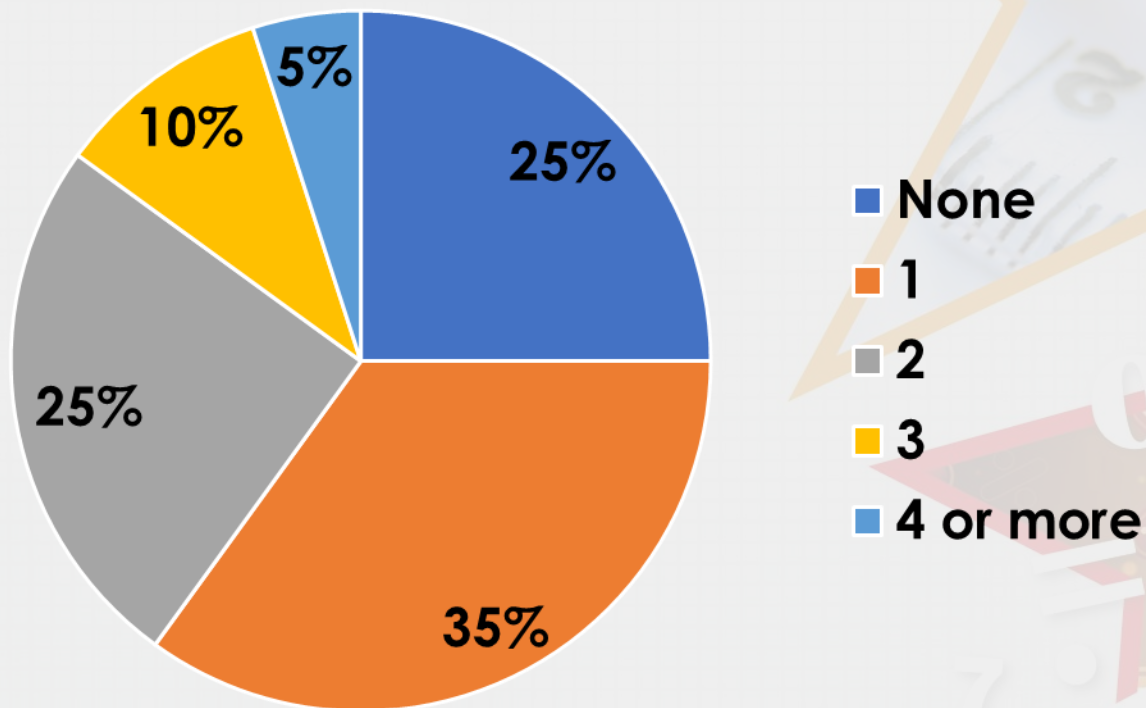
**200 children were asked how many siblings they have.  
Here are the results:  
Number of siblings**



**How many more children have two siblings than three?**

## Varied Fluency 2

200 children were asked how many siblings they have.  
Here are the results:  
Number of siblings



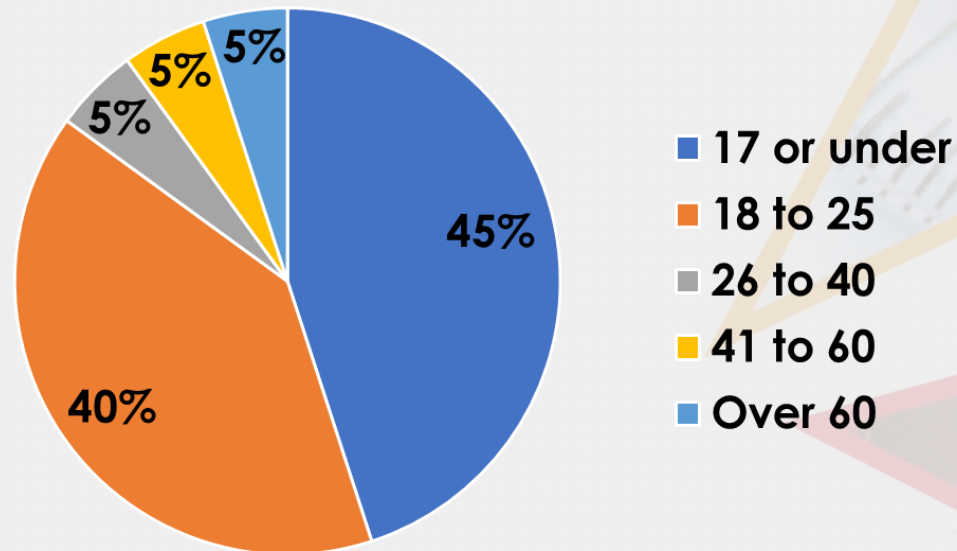
How many more children have two siblings than three?

**30**

### Varied Fluency 3

**120 people were asked their age.  
Here are the results:**

#### Ages



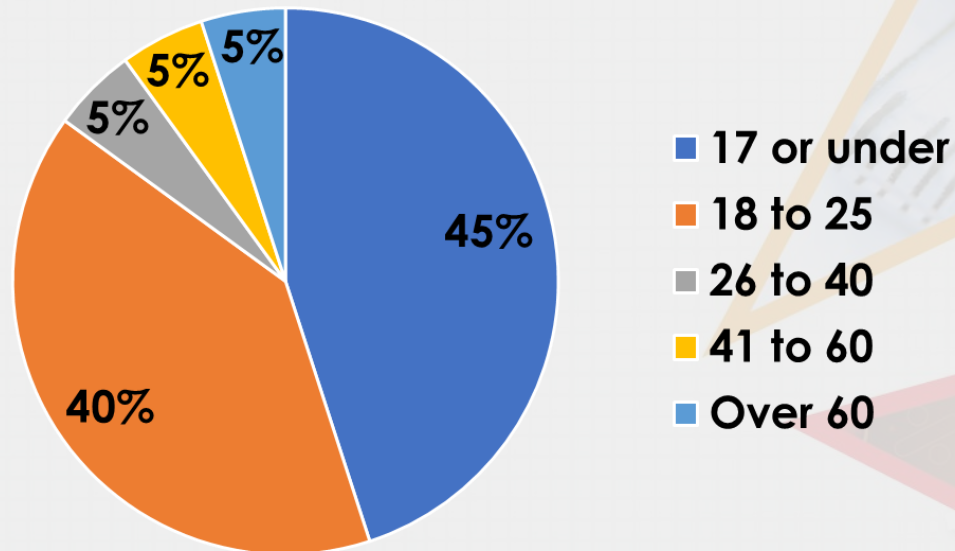
**How many were in each age bracket?**



### Varied Fluency 3

**120 people were asked their age.  
Here are the results:**

#### Ages



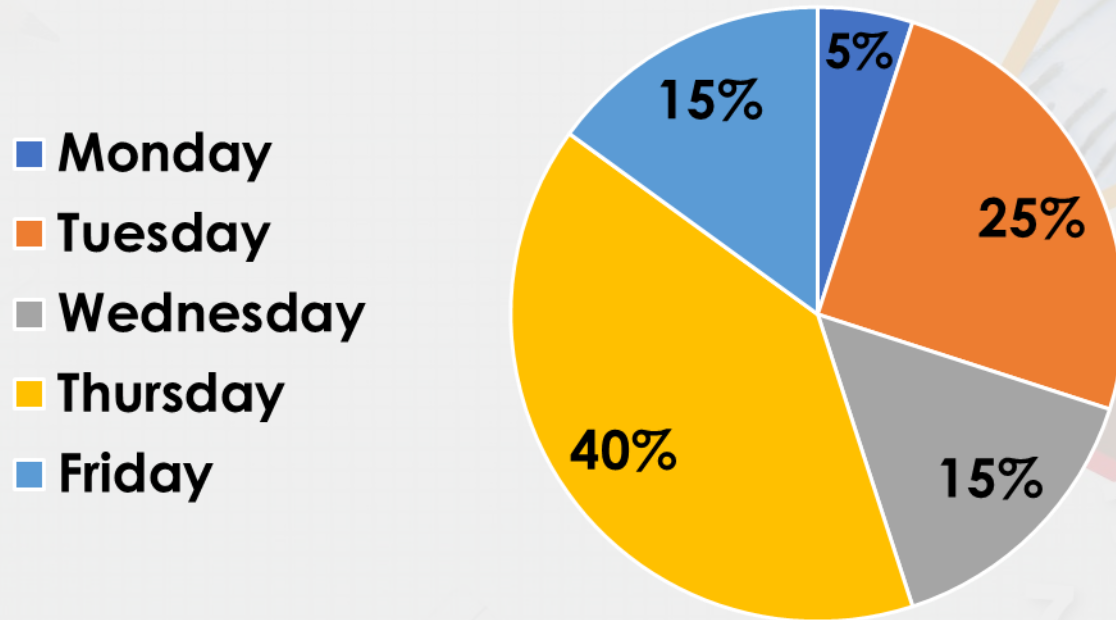
**How many were in each age bracket?**

**17 or under – 54, 18 to 25 – 48, 26 to 40 – 6, 41 to 60 – 6, Over 60 – 6**

## Varied Fluency 4

If 30 people chose Friday, how many chose Thursday?

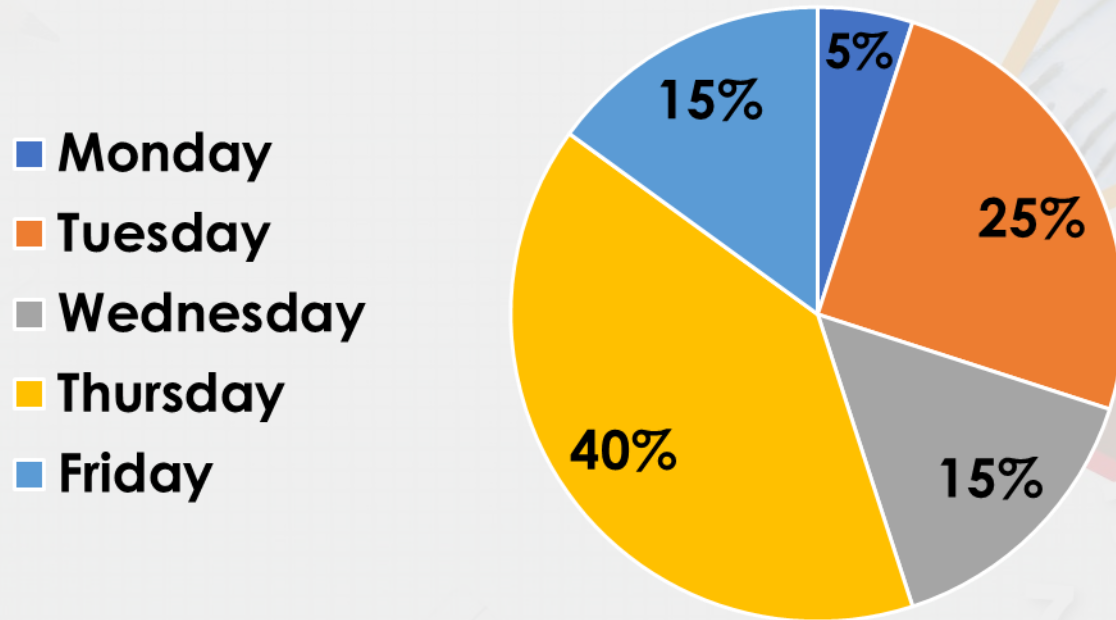
### Favourite day at school



## Varied Fluency 4

If 30 people chose Friday, how many chose Thursday?

### Favourite day at school

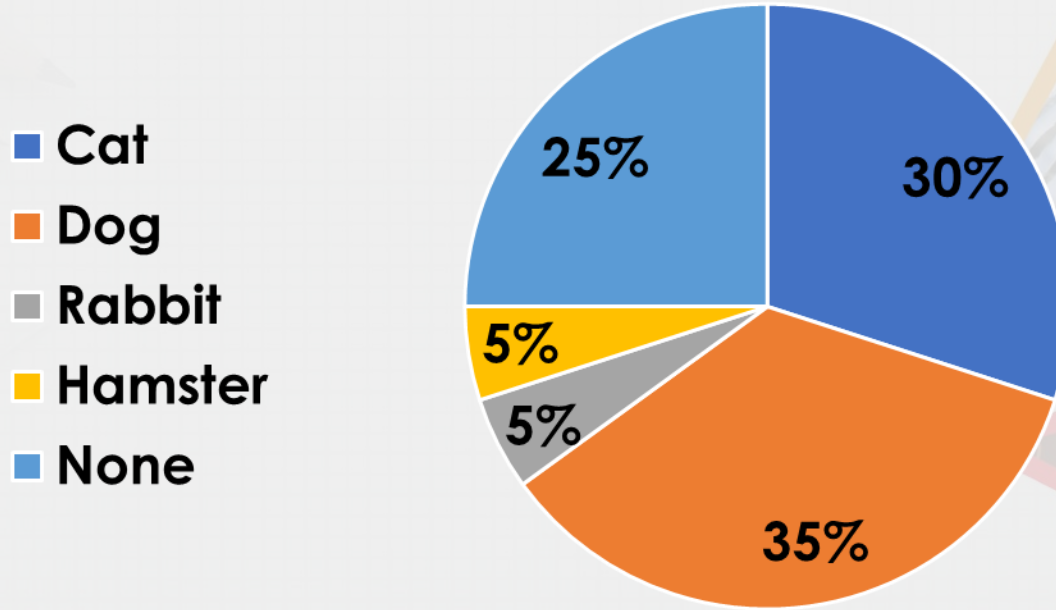


**80**

## Problem Solving 1

Children were asked what pets they have. This was the result:

### Pets



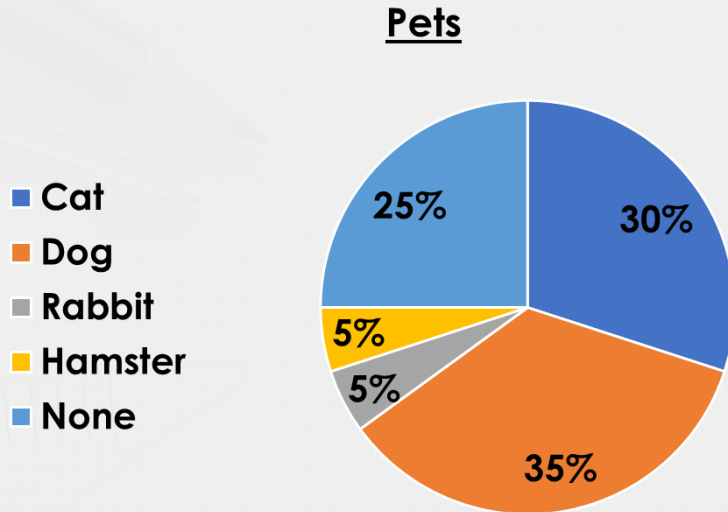
10 children have a hamster.

Use this information to help you convert the pie chart into a table.



## Problem Solving 1

Children were asked what pets they have. This was the result:



Cat	60
Dog	70
Rabbit	10
Hamster	10
None	50

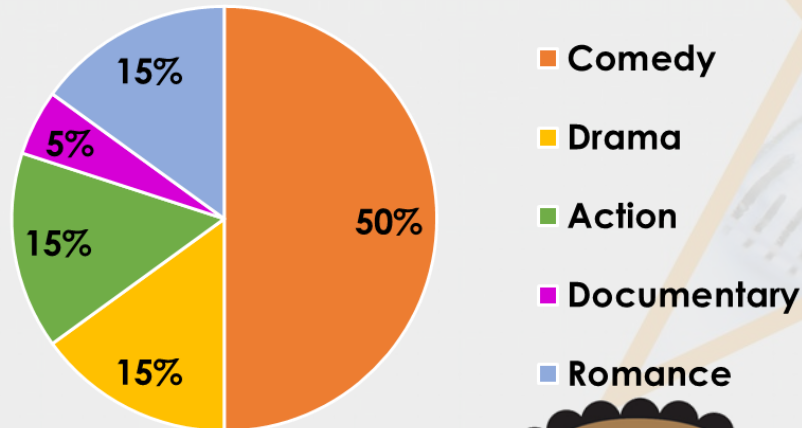
10 children have a hamster.

Use this information to help you convert the pie chart into a table.

## Reasoning 1

Lisa is reading a pie chart about the favourite film genres of 60 children.

### Favourite Film Genres



She says,

The same people  
chose drama, action  
and romance.



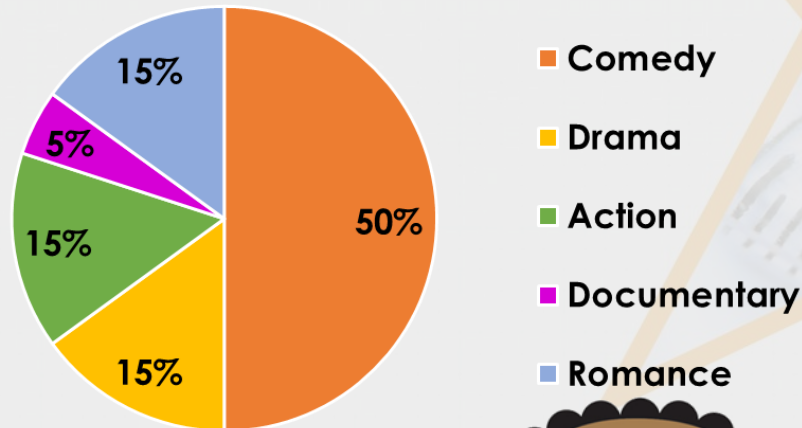
Lisa

Is she right? Explain how you know.

## Reasoning 1

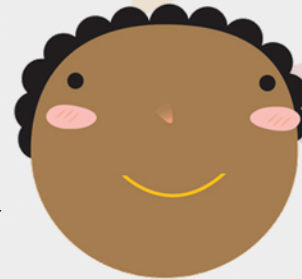
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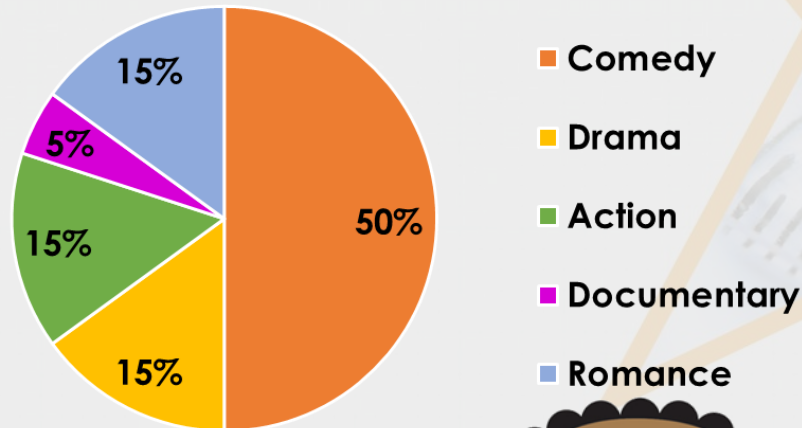
Lisa

Is she right? Explain how you know. Lisa is not correct because...

## Reasoning 1

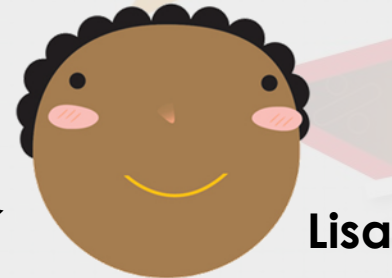
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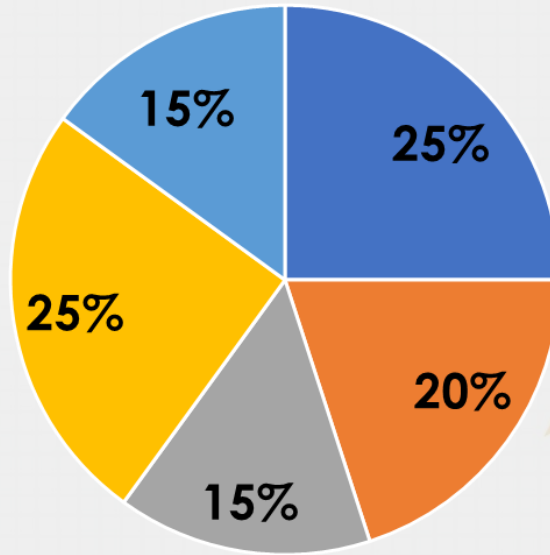
Is she right? Explain how you know. **Lisa is not correct because the pie chart tells us the number of different people who voted for their favourite film genres. The numbers are the same, not the people.**



## Reasoning 2

**What information can you get from this pie chart?**

**What does it not tell you?**

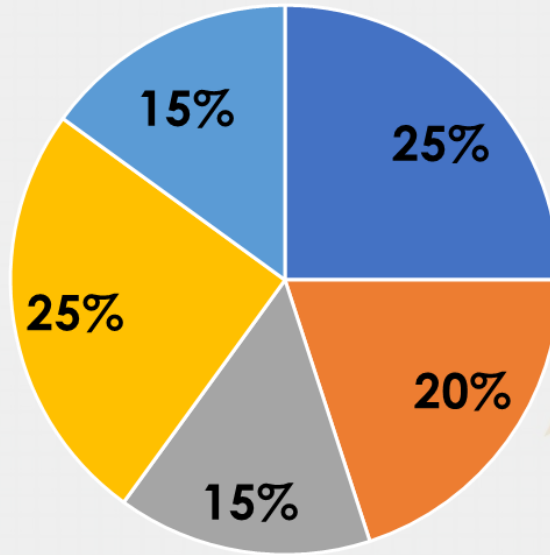


■ Maths ■ English ■ Art ■ PE ■ Science

## Reasoning 2

**What information can you get from this pie chart?**

**What does it not tell you?**



■ Maths ■ English ■ Art ■ PE ■ Science

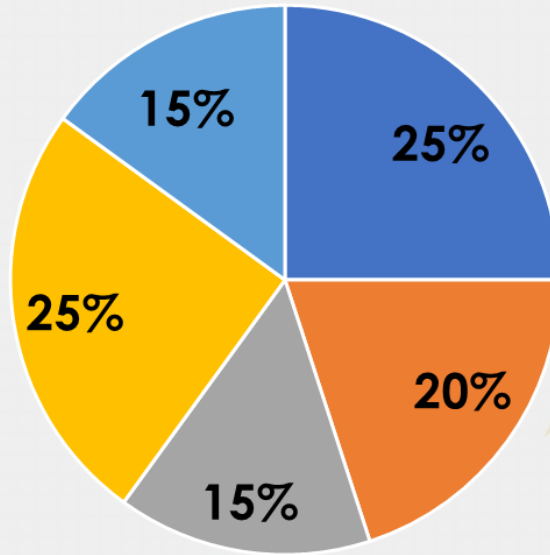
**You can tell that...**

**You cannot tell...**

## Reasoning 2

**What information can you get from this pie chart?**

**What does it not tell you?**



■ Maths ■ English ■ Art ■ PE ■ Science

**You can tell that the same amount of people chose art and science.  
You cannot tell how many chose any subject because the chart  
doesn't give any information on how many people were asked.**