

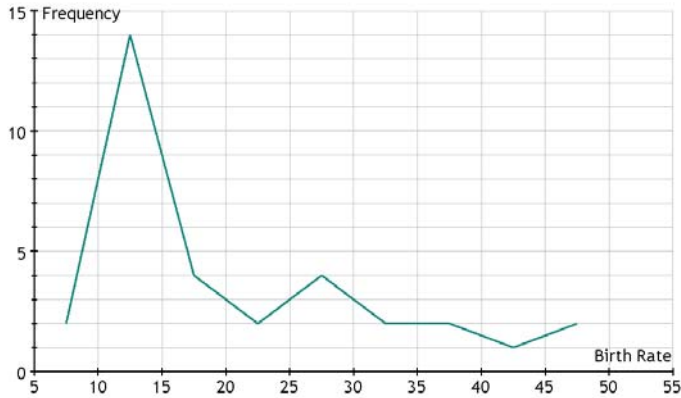
## STATISTICAL ENQUIRY

Name: \_\_\_\_\_

Assessment Criteria: Examine critically the results of a statistical enquiry, and justify the choice of statistical representation in written presentations

*Note: Birth rate is defined as births per 1000 people per year*

1. The frequency polygon represents the birth rates of a random sample of 33 countries from around the world in 2005.



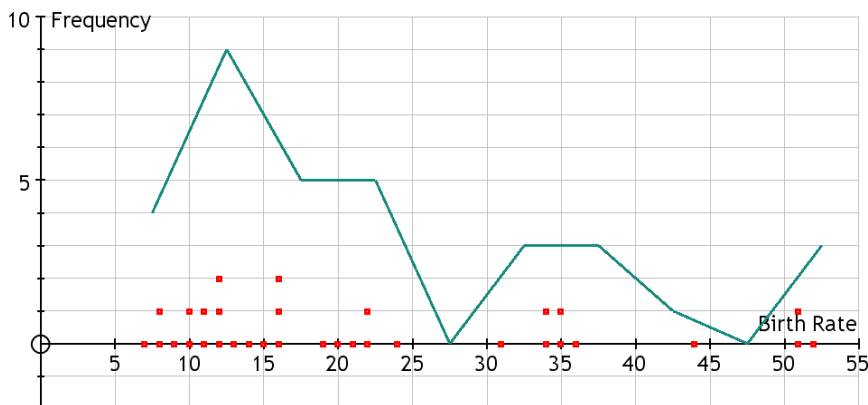
a) What is the modal class?  
\_\_\_\_\_

b) Between what two values does the median result lie?  
\_\_\_\_\_ and \_\_\_\_\_

c) Do you think the mean will be bigger or smaller than the median? Explain your answer.

\_\_\_\_\_ because \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. The frequency polygon here shows the birth rates of the same 33 countries in 2001. The dot plot underneath shows the exact birth rates of the countries.



a) Describe the change in birth rates over the five year period.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b) Nine of the thirty countries sampled are shown in the table below.

<i>Sweden</i>	<i>South Korea</i>	<i>New Zealand</i>
<i>Romania</i>	<i>San Marino</i>	<i>Uganda</i>
<i>United Kingdom</i>	<i>Georgia</i>	<i>Lithuania</i>

The country with the highest birth rate is in the table. Which country do you think it is? Explain your answer.

\_\_\_\_\_ because \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Both frequency polygons show positive skew. Explain why this is the case.

\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Overall, I think my success level is:

Low                  High

Q	STATISTICAL ENQUIRY	😊	☹
	I can interpret frequency polygons		
	My analysis justifies the use of the diagrams included		
	I can examine thoroughly the results provided		
	<i>I can justify generalisations, arguments or solutions</i>		

I need to practise ...