

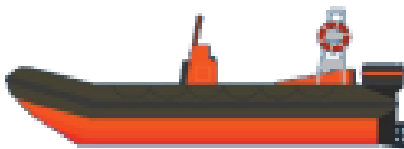
L.O: To Review Statistics on a Beach Adventure- 12. 05. 2020 / XII. V. MMXX

Clues and answers are at the end of the document. Only use the clues if needed and don't check your answers until the end. Good luck!

Yippee, they finally arrive at Scarborough and Sam and Lydia can see the golden sand. They are so excited to start making sandcastles in the sunshine.

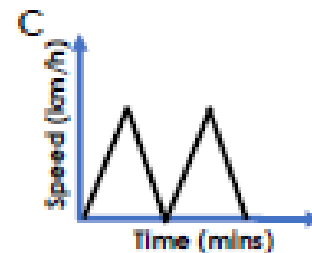
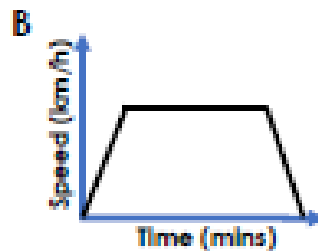
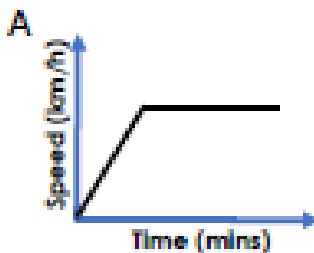
After a while making sandcastles, Sam is eager to have a go in the dinghy as the sea is calm. Dad reminds them to be careful and stay close to the shore.

It isn't long before Mum hears Lydia shouting. "MUM, MUM, look where Sam is!!" A gust of wind had blown Sam further out from the shore. Quick-thinking mum phones 999 and asks for the Coastguard. She explains the situation and they say they will send the local lifeboat. Mum and Dad go to the shoreline to keep Sam calm until help arrives.



The lifeboat launches from the local station and makes its way, at full speed, to the dinghy with Sam aboard. When they spot the dinghy, they come to a stop making sure Sam is safe.

2. Which line graph below shows the lifeboat's journey to Sam?



The lifeboat takes Sam back to the beach where the rest of the family are pleased to see him. Thank goodness he is safe. The children stick to playing on the beach for the rest of the day, staying away from the sea.



All the way home, Sam asks lots of questions about the lifeboat and the people that came to rescue him.

"Dad, is that their job? Do they rescue lots of people? Do they only rescue children? Do only men rescue people?"

There were so many questions. Sam decided to find out as much information as he could about the lifeboat once he got home.

The first thing Sam wanted to find out was about the people who work, rescuing people, for the lifeboats in Scarborough. Help Sam complete the table below to find the missing information.

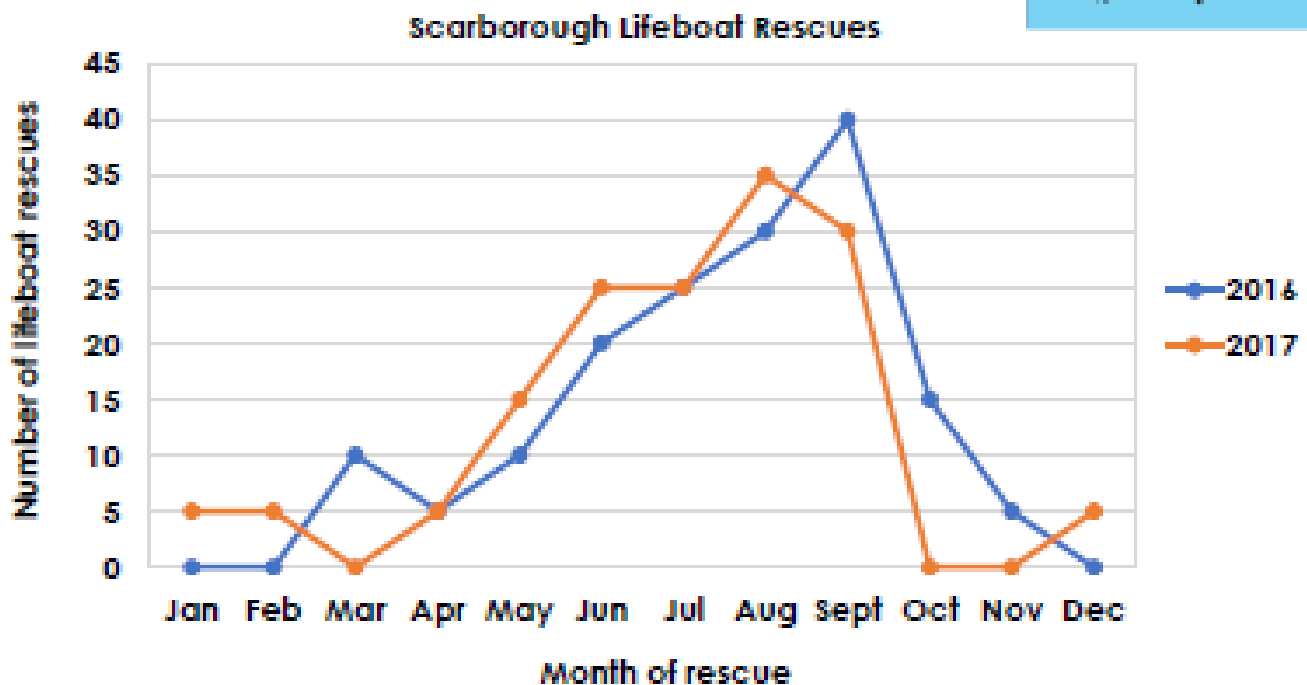
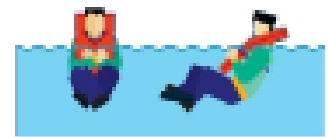
3.



| | Coxswain | Mechanic | Crew | Total |
|-------|----------|----------|------|-------|
| Men | 2 | | | 35 |
| Women | 1 | | 8 | |
| Total | | 9 | 34 | |

Now Sam knows who works at the Scarborough station, he wants to find out how many people they have rescued over the year.

4. Use the line graph to help Sam find the answers to his questions.



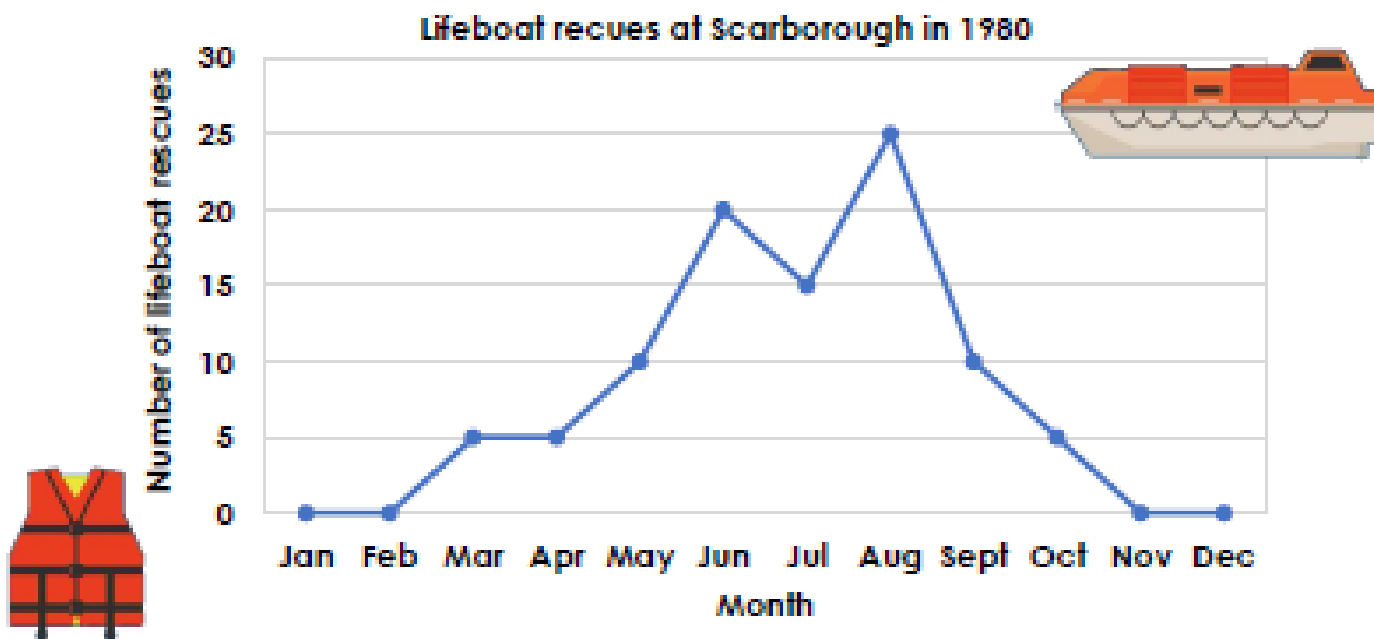
4a. Is one month busier than the rest?

4b. Do they rescue more people every year?

4c. What is the difference, in each year, between May and July?

4d. How many rescues were there in total, in July and August?

Wow! Sam is amazed how many people are rescued every year by the lifeboat just at Scarborough. He talks to his dad and is surprised to hear that lifeboats were in action when he was a boy too. Sam decides to find out how busy Scarborough lifeboat station was in the past. He plots what he finds on a line graph.



5. What was the information that Sam used to plot the graph?

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| 1980 | | | | | | | | | | | | |

Sam has spent lots of time finding out about the lifeboats that Dad has decided to treat him to a surprise trip to visit the lifeboat station at Scarborough to meet some of the people who save lives. They are going to go on the train and Dad has arranged to be at the lifeboat station for 10:30am.

| | | | | | | |
|-------------|-------|-------|-------|-------|-------|-------|
| Leeds | 08:08 | 09:01 | 09:13 | 09:19 | 09:35 | 09:51 |
| York | 08:25 | 09:25 | 09:40 | 09:55 | 10:01 | 10:10 |
| Seamer | 09:15 | 09:54 | 10:18 | 10:23 | 10:46 | 10:58 |
| Scarborough | 09:25 | 10:00 | 10:25 | 10:31 | 10:51 | 11:06 |

6. Which is the latest train that Sam and his dad could catch from York?

Dad waits till the morning and then shares the surprise with Sam. He is so excited and can't wait to get to the lifeboat station to meet the people and find out more about all the equipment they use.

Clues:

2. The lifeboat needs to work its way to a full speed, then it will travel at that full speed, and then it will need to slow down to a stop to get Sam.

3. Step 1: add Coxswain men and women

Step 2: and the 3 totals across the bottom to find the overall total

Step 3: You will have to subtract the smaller numbers from the total numbers to fill in the rest of the table

4a. You'll have to add both years together, which month is the highest on the graph?

4b. Equation 1- add all the orange numbers

Equation 2- add all the blue numbers

4c. Subtract the blue May number from the blue July number

Subtract the orange May number from the orange July number

4d. $25+25+30+35=$

5. Fill out every number in the table from the chart. In January you would write 0.

6. They have to arrive in Scarborough before 10:30, which train would be the best option leaving from York?

Answers:

2. Graph B shows the lifeboat getting up to full speed, travelling at full speed and coming to a stop at Sam's dinghy.
3. Various answers. One example of how the table could be completed is shown below.

| | Coxswain | Mechanic | Crew | Total |
|-------|----------|----------|------|-------|
| Men | 2 | 7 | 26 | 35 |
| Women | 1 | 2 | 8 | 11 |
| Total | 3 | 9 | 34 | 46 |

4. a. Is one month busier than the rest?

September

b. Do they rescue more people every year?

No. In 2016: 160 rescues
and in 2017: 150 rescues

c. What is the difference, in each year, between May and July?

In 2016: 15 and in 2017:
10

d. How many rescues were there in total, in July and August?

115

5.

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| 1980 | 0 | 0 | 5 | 5 | 10 | 20 | 15 | 25 | 10 | 5 | 0 | 0 |

6. The latest train that Sam and his dad could catch would be the 09:40 from York.