## Monday 16 ${ }^{\text {th }}$ November 2020

Use line graphs to solve problems

Please watch the Tutorial Video and answer the questions on the next few pages. :)


Video Link: https://vimeo.com/466529487

1) This graph shows how many miles an aeroplane has left to travel each hour on its journey from London to New York.


## Questions on the next slide

a) How many hours is the flight?
b) How many miles is the journey from London to New York?

c) After 4 hours, how many more miles are left to travel?
d) How long does it take to fly the final 1,000 miles?
e) How many miles does the plane travel between 2 hours and 4 hours into the flight?

f) Estimate how far the plane has travelled after 3 hours and 30 minutes.

2) The graph shows the rainfall in the first 8 days in October.

a) How many millimetres of rain fell on the 7th October?
b) It rained every day in the first 8 days in October.

Is this statement correct? $\qquad$
Explain your answer.
$\qquad$
$\qquad$
c) The record amount of rainfall for October is 2.5 cm

Has a new record been set? $\qquad$
Explain your answer.

## 3. This graph

 shows the conversion between miles and kilometres
a) How many kilometres are there in 50 miles?
b) How many miles are there in 130 km ?
$\square$

c) Explain to a partner how you worked out the answers to part a) and b).
d) Eva cycles 60 miles.

Dexter cycles 80 km .
Who cycles the furthest? $\qquad$
How much further does the person cycle?
$\square$
e) Ron wants to convert 800 km into miles.


Ron is incorrect. Explain why.

Complete the conversion.
Show your working.
$\square$

| Question | Answer |
| :---: | :---: |
| 1 | a) 7 hours <br> b) 3,500 miles <br> c) $\approx 1,450$ miles <br> d) $\approx 2.2$ hours <br> e) $\approx 1,200$ miles <br> f) $\approx 1,750$ miles |
| 2 | a) 3 mm <br> b) No. It did not rain on 3rd October. <br> c) Yes. $2.5 \mathrm{~cm}=25 \mathrm{~mm}$, and the total for the first 8 days of October is more than 25 mm , so the total for the whole of October will be more than 2.5 cm . |
| 3 | a) 80 km <br> b) 81 miles <br> c) To work out how many kilometres in 50 miles, draw a line up from 50 miles on the horizontal axis and draw across to the vertical axis from where this meets the graph. To work out how many miles in 130 km , draw a line across from 130 km on the vertical axis and draw down to the horizontal axis from where this meets the graph. <br> d) Eva 10 miles <br> e) Ron can convert 80 km into miles and then multiply his answer by 10 . $800 \mathrm{~km}=500$ miles |

