

HOME LEARNING

Year 11

Task 3

Focus for this week: Time & Distance-time graphs

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| Essential learning: | <ul style="list-style-type: none">• Reading and setting time on analogue and digital clocks• Comparing 12 hour (am and pm) and 24 hour time |
| Practising: | <ul style="list-style-type: none">• Finding the duration between two times• Writing the number of minutes as hours (as a decimal) |
| Learning about: | <ul style="list-style-type: none">• Drawing and understanding distance time graphs |
| Extension: | <ul style="list-style-type: none">• Drawing and understanding real-life graphs |

Tasks:

27/4/20 Maths Worksheet 1: Reading and setting the time: 12 and 24 hour clock

Read the instructions for each clock and write the time in 12 and 24 hour digital time. The first one is done as an example for you.

a) Bob arrived home from school



4:00 pm
16:00

b) Sam has a late breakfast



c) Alice eats her lunch



d) The evening film finishes



e) Jim wakes up and hears an owl



f) It is dark and cold outside.



g) Chelsea has a late breakfast on Saturday



h) Chelsea is watching the Saturday afternoon football



i) It is sunny outside



j) Tom is having an afternoon walk



Email completed worksheets to me at acroft@bower-grove.kent.sch.uk . Each good attempt earns a golden token.

27/4/20 Maths Worksheet 2: Plan a journey

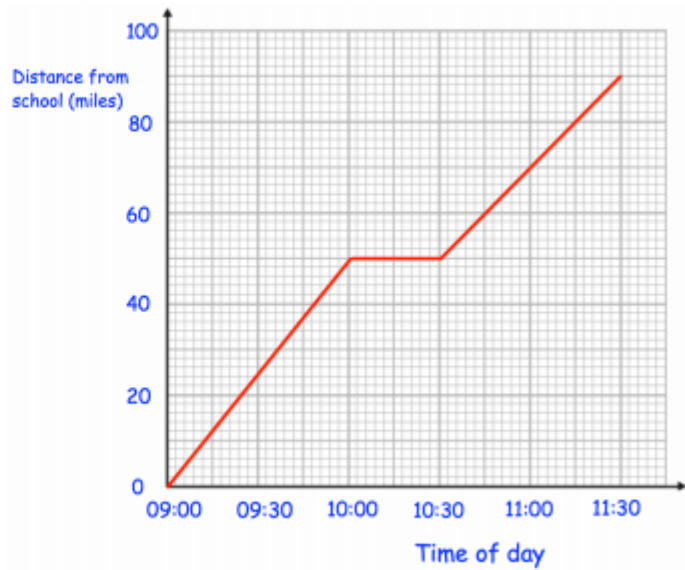
Plan a journey from your home town (that could be done when the pandemic is finished) to either Manchester, Liverpool, Edinburgh or Leeds using only public transport.

You can use the internet to help you find bus, coach, ferry, plane and train time tables.

1. Choose what day & time you would want to leave your house;
2. You may want to consider how you would get to the nearest bus stop or train station;
3. What is the shortest journey you can find?
4. Show your journey as a leaflet or a poster

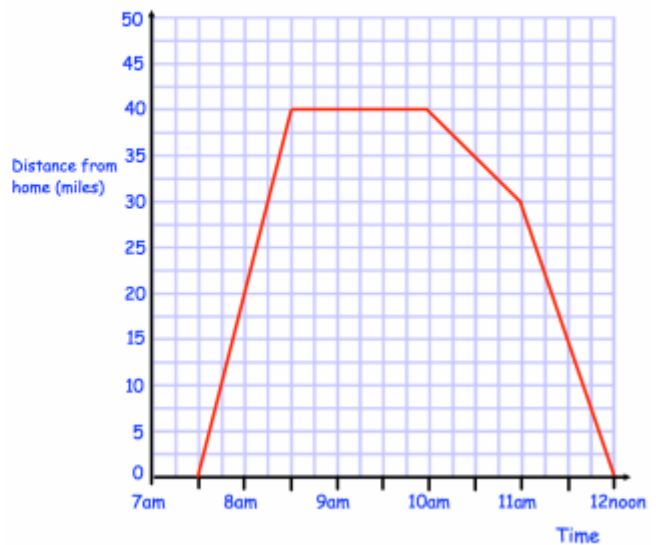
Question 1: The distance-time graph shows class 8A's journey to the zoo.
They stopped for a picnic on the way to the zoo.

- (a) What time did the bus leave school?
- (b) What time did they stop for a picnic?
- (c) How far had they travelled when they stopped for a picnic?
- (d) How long did they stop for?
- (e) What time did they arrive at the zoo?
- (f) How far is the zoo from school?



Question 2: Emma travelled to her Grandmother's house and back.
The distance-time graph shows information about her journey.

- (a) What time did Emma begin her journey?
- (b) How far was Emma from home at 8am?
- (c) How long did Emma stay at her Grandmother's house?
- (d) What time did Emma leave her Grandmother's house?
- (e) How far was Emma from home at 11:45?
- (f) How far did Emma travel in total?



Question 3: A train travels from Milton to Redville, stops for 30 minutes, then travels to Leek.

(a) How long did it take the train to travel from Milton to Redville?

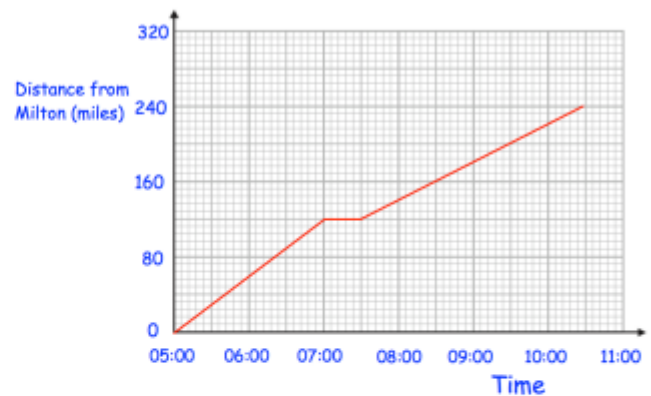
(b) How far is Redville from Milton?

(c) Work out the speed of the train for the journey from Milton to Redville.

(d) How long did it take the train to travel from Redville to Leek?

(e) How far is Leek from Redville?

(f) Work out the speed of the train for the journey from Redville to Leek.

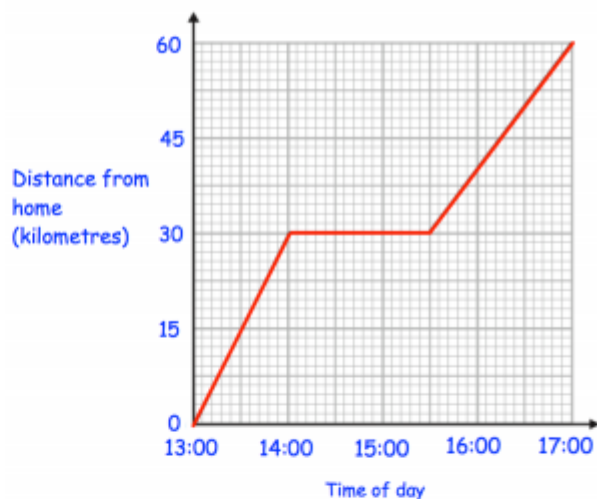


Question 4: Ben drove 60 kilometres, from his home to Liverpool. He stopped and visited his friend Tim on the way.

(a) Work out Ben's speed for the first part of his journey.

(b) How long did Ben spend visiting Tim?

(c) Work out Ben's speed for the last part of his journey.



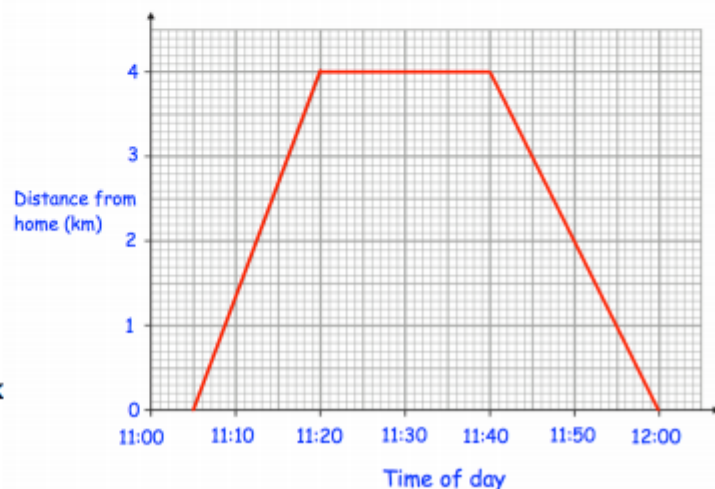
Question 5: Laura goes for a cycle from her house to the post office, 4km away.

(a) How long did it take Laura to cycle to the post office?

(b) Work out Laura's speed cycling to the post office.

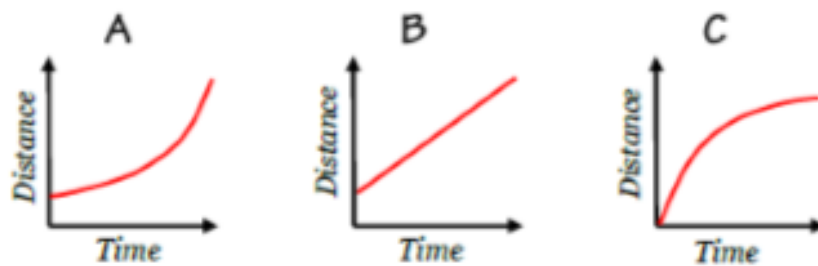
(c) How long did Laura spend at the post office?

(d) Work out Laura's speed cycling back home.

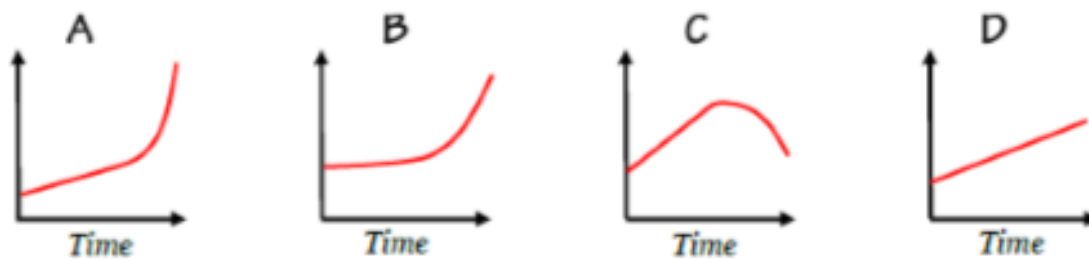


Real Life Graphs 2

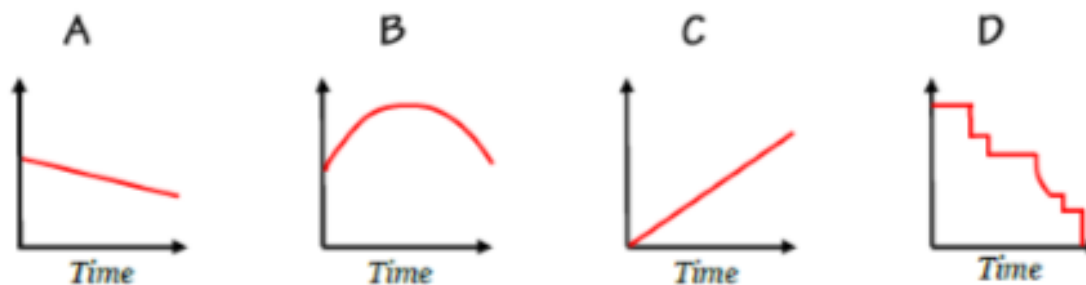
Section A: Decide which of the graphs best fit the statements below.



- 1) The distance travelled by a motorbike moving at a constant speed.
- 2) The distance travelled by a car accelerating.
- 3) The distance travelled by a cyclist who starts fast, but gradually slows down.



- 1) The birth rate was steady but now it is rising.
- 2) The price of petrol has been rising steadily since.
- 3) Unemployment rose slowly for 5 years, but now it is rising dramatically.
- 4) Inflation had been rising steadily but it is now falling.



- 1) The number of Euros that can be purchased with £x.
- 2) The price of housing has been falling steadily since 2011.
- 3) The temperature during the 24 hours of 11th August 2014.
- 4) The amount of tea in a cup that is drunk.