

Functional Skills Maths: Entry Level 3

Assessment Task: Buying a laptop

For full marks in this assessment you will need to:

- Show all the calculations you need to do
- Show how you have checked your calculations
- If you make a choice, say why you have made that choice

In this assessment you can use a calculator



Assessment Task: Buying a laptop

Part A (24 marks)

You live in Elmscott and you are taking a train to go shopping.

Look at the timetable on Resource sheet 1.

The first six trains from Elmscott are shown.

1. What time would you expect the seventh train to leave Elmscott?

(1 mark)

The computer shop is in Stratton.

You want to arrive in Stratton **just before** the shops open at nine o'clock.

2. What time is the latest train you could catch from Elmscott?

(2 marks)

3. How long does the train journey take?

(3 marks)

Stratton Computer World sells four different laptops.
These are shown on Resource sheet 2.

You want to buy a laptop with a screen size that is at least 15 inch.

4. Choose a laptop and write down the name of the model and its cash price.

(2 marks)

You decide to pay monthly for the laptop.

5. How much will you pay in total when you pay monthly for your chosen laptop?
You must show your working.

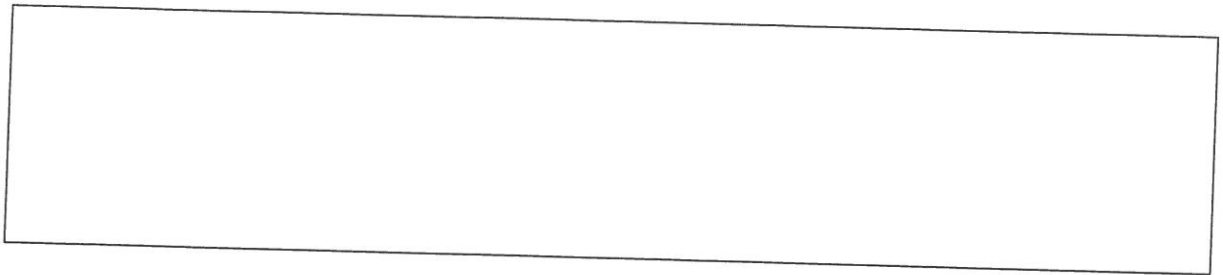
(3 marks)

6. What is the difference between the total cost paying monthly and the cash price?
You must show your working.

(2 marks)

You also want to buy a case and some speakers for the laptop.

7. Choose a case and speakers and write down the name and cost of each.

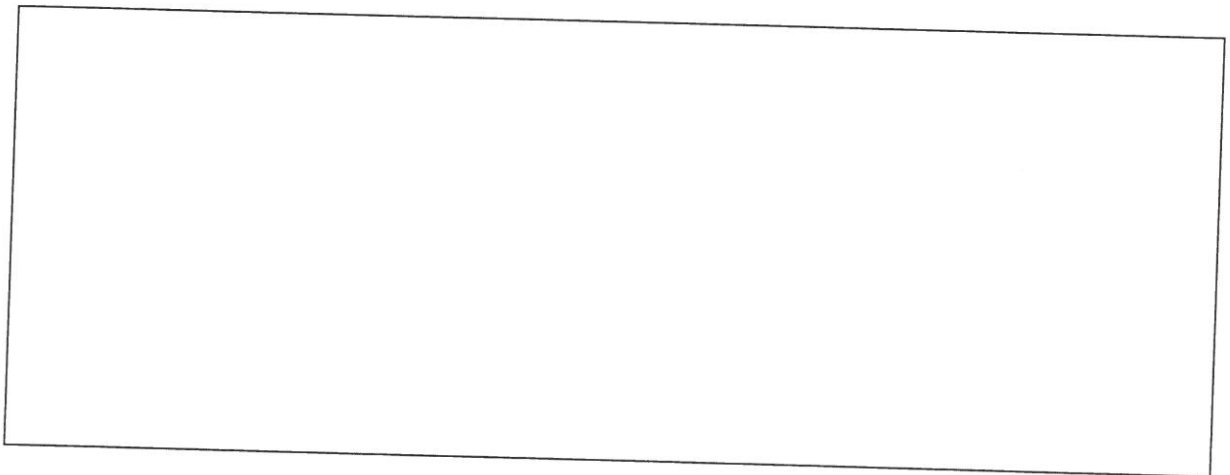


(2 marks)

All the cases and speakers are on special offer.

They are reduced to one third of the price shown on Resource sheet 2.

8. How much will your chosen case and speakers cost in total?
You must show your working.

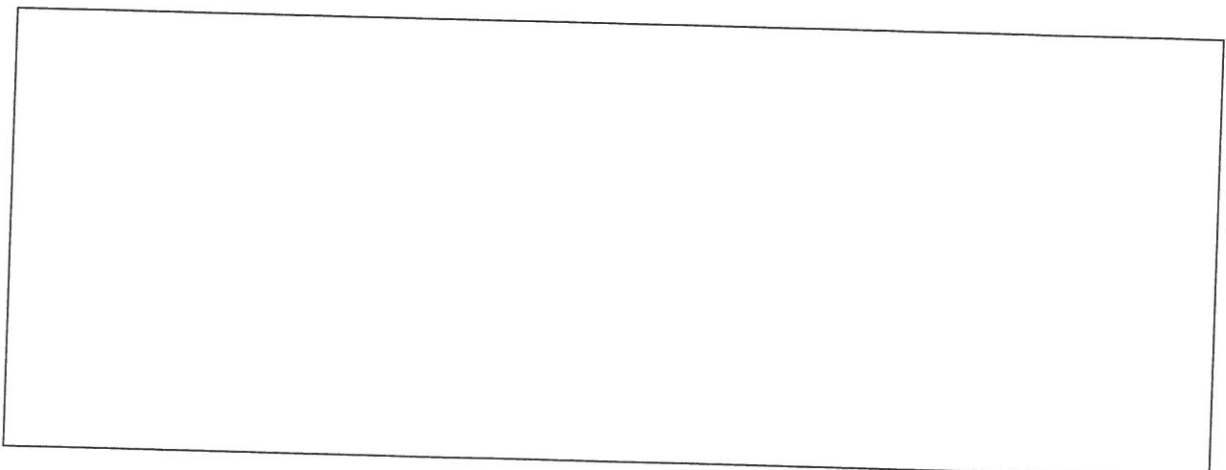


(3 marks)

You decide to get a taxi to your friend's house in Whitstone to show him your laptop.

The taxi company charges a pick up fee of £3.50 and then £2 per mile travelled.

9. How much will the taxi journey from Stratton to Whitstone cost?
You will need Resource sheet 1.

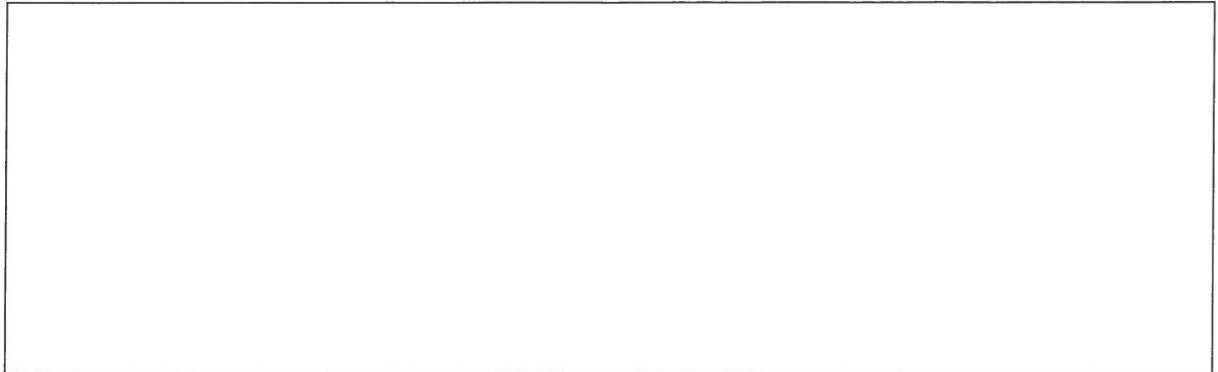


(3 marks)

The next day you charge the laptop battery fully.

You then start using the laptop at 10:25 am **without** plugging it in.

10. According to Resource sheet 2, at what time will the battery run out?



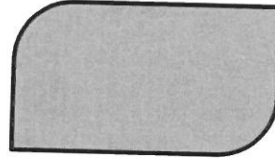
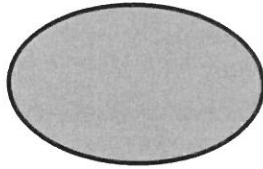
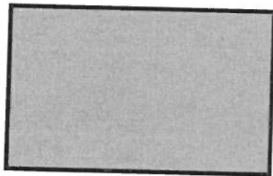
(3 marks)

Part B (8 marks)

11. What is the name of the 3D shape of the Wireless bass speaker on Resource sheet 2?

(1 mark)

The laptop comes with a free mouse mat.
You can choose one of three different shapes of mouse mat.



12. What is the name of the shape of the mouse mat with 4 right angles?

(1 mark)

The journey from Elmscott to Mead is 7 miles which is the same distance as 11.2 km.

13. What does km stand for?

(1 mark)

This table shows the number of laptops Stratton Computer World sold in one month.

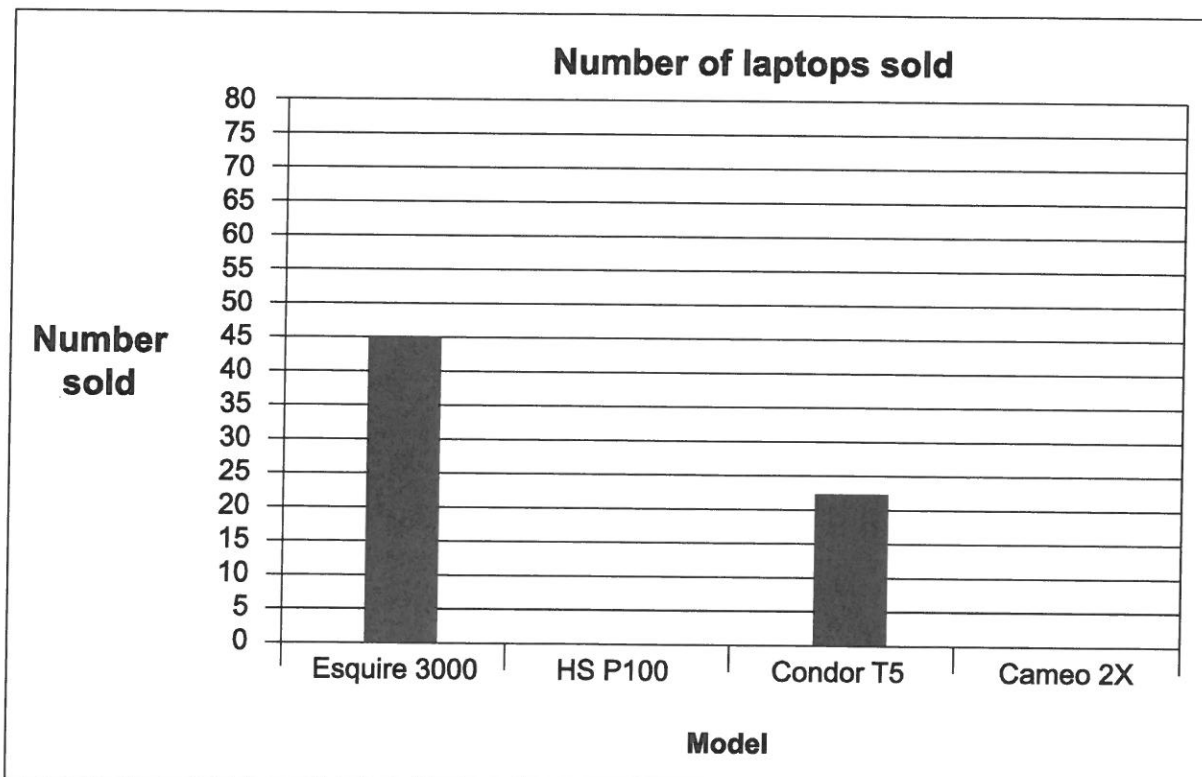
The number of Cameo 2X laptops sold is missing from the table.

Laptop model	Number sold
Esquire 3000	45
HS P100	70
Condor T5	20
Cameo 2X	
Total	175

14. How many Cameo 2X laptops did Stratton Computer World sell?

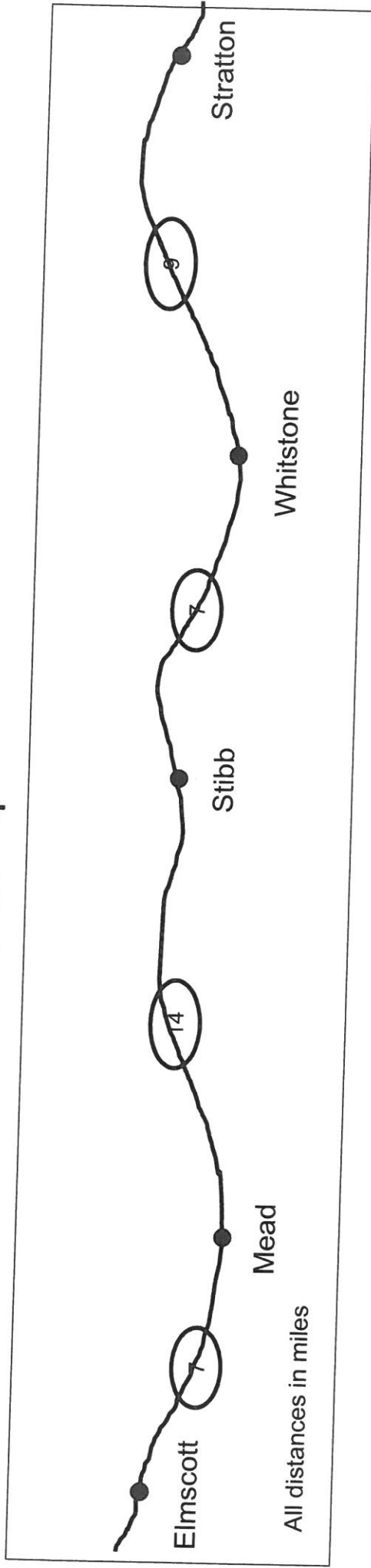
(3 marks)

15. Complete the chart below to show the laptops sold by Stratton Computer World in the month.



(2 marks)

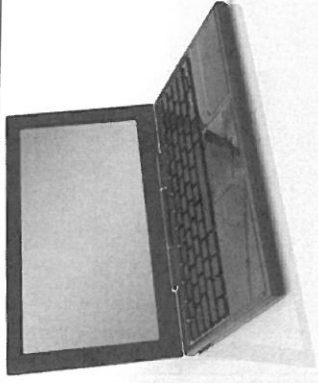
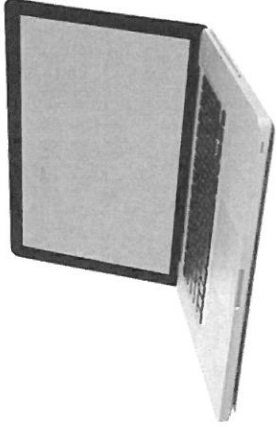

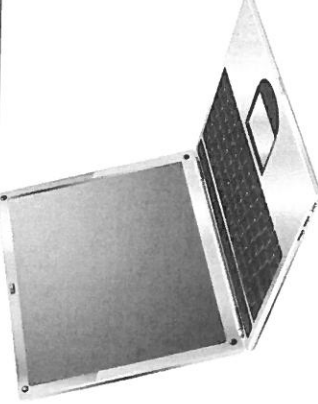
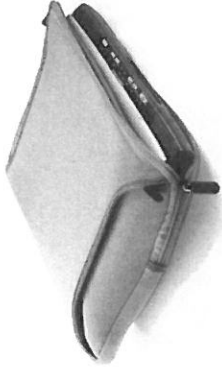





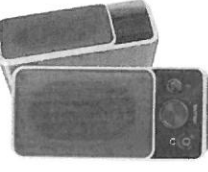
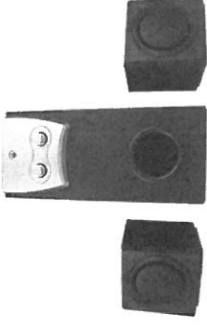
EL3 Set N Resource sheet 1 – Road distance map



Train Timetable

Elmscott to Camelford Morning Service										
Elmscott	0545	0630	0715	0800	0845	0930				
Mead	0550	0635	0720	0805	0850	0935				
Stibb	0605	0650	0735	0820	0905	0950				
Whitstone	0615	0700	0745	0830	0915	1000				
Stratton	0640	0725	0810	0855	0940	1025				
Camelford	0655	0740	0825	0910	0955	1040				

EL3 Set N Resource sheet 2 –Stratton Computer World

 <p>Esquire 3000 laptop 15.6 inch screen size Memory 8GB I5 processor 7 hours battery life Cash price £349 (or 5 monthly payments of £74)</p>	 <p>HS P100 laptop 15.4 inch screen size Memory 4GB I5 processor 6 hours battery life Cash price £549 (or 5 monthly payments of £119)</p>	 <p>Condor T5 laptop 12.6 inch screen size Memory 8GB I5 processor 5 hours battery life Cash price £269 (or 5 monthly payments of £59)</p>	 <p>Cameo 2X laptop 17.3 inch screen size Memory 16GB I5 processor 8 hours battery life Cash price £459 (or 5 monthly payments of £102)</p>
 <p>Slim case Price £15</p>	 <p>Holdall case Price £24</p>	 <p>Backpack case Price £33</p>	 <p>Travel case Price £39</p>
 <p>Wireless bass speaker Price £18</p>	 <p>Retro ball speakers Price £27</p>	 <p>Premium light speakers Price £12</p>	 <p>Super sound speakers Price £54</p>

**OCR MATHS
FUNCTIONAL SKILLS MARK SCHEME ENTRY LEVEL 3 SET N**

Series	Set N	Level	Entry Level 3
Mark scheme analysis			
Skill area	Assessment weighting	Marks out of	Actual Marks
Representing	30%-40%	10	
Analysing	30%-40%	11	
Interpreting	30%-40%	11	
Total		32	

Pass mark = 18 (60%)

	Question	Award Maximum	on evidence of ...	Skills standard	Coverage and range
1	Use number pattern to find train time	1	1: 1015 or 10.15 am (or equivalent)	R	g, k
2	Identify latest train departure time	2	1: arrival time at Stratton 0855 from timetable (assume if correct departure time written) 1: corresponding departure time from Elmscott: 0800	R	h, k
3	Identify train journey time	3	1: counting on using their times from Q2 (assume if correct time written) 1: correct journey time (55) 1: correct units (minutes)	R	a, k

Question	Award Maximum	on evidence of ...	Skills standard	Coverage and range
4 Choose laptop and cash price	2	1: name of lap top with screen >15" 1: correct cash price for this lap top (do not penalise incorrect monetary notation)	R	e, k
5 Calculate total cost of laptop paying monthly	3	1: correct monthly payment identified for their laptop (must be written or observed) 1: a method seen to multiply their monthly payment by 5 (must be written or observed) 1: correct answer (do not penalise incorrect monetary notation)	A	b, h, k
6 Calculate difference in costs	2	1: their answer to Q5 – their cost from Q4 (must be written or observed) 1: correct answer (do not penalise incorrect monetary notation)	A	a, f, h
7 Choose case and speakers and costs	2	1: case written with correct cost 1: speakers written with correct cost (do not penalise incorrect monetary notation)	R	k
8 Calculate cost of case and speakers	3	1: both costs from Q7 added (must be written or observed) 1: their answer divided by 3 (must be written or observed) 1: correct answer (do not penalise incorrect monetary notation)	A	b, d
9 Calculate taxi cost	3	1: identify journey distance from map (assume if seen in calculation) 1: a correct method, distance x (£)2 + (£)3.50 (must be written or observed) 1: correct answer with correct monetary notation (£21.50)	A	b, f, h

Question	Award Maximum	on evidence of ...	Skills standard	Coverage and range
10 Identify time battery runs out	3	<p>1: identifying battery life for their chosen laptop (assume if correct run out time seen)</p> <p>1: counting on from 10:25 am (assume if correct run out time seen)</p> <p>1: correct time in correct format (ie. correct use of pm or 24hr equivalent)</p>	I	h, k
11 Identify shape of speaker	1	<p>1: cylinder (do not penalise spelling as long as meaning is clear)</p>	I	i
12 Identify shape with 4 right angles	1	<p>1: rectangle (do not penalise spelling as long as meaning is clear) (oblong is not acceptable)</p>	I	i
13 Identify km	1	<p>1: kilometre (do not penalise spelling as long as meaning is clear)</p>	I	j
14 Identify value missing in table	3	<p>1: adding 45, 70 and 20 (assume if 40 seen)</p> <p>1: subtracting their answer from 175 (assume if 40 seen)</p> <p>1: 40 (accept 40 written in table) or correct answer to their subtraction</p>	I	a, k
15 Complete chart	2	<p>1: bar drawn in HS P100 at 70</p> <p>1: bar drawn in Cameo 2x at their answer to Q14</p>	I	k
	Total 32			