A screenshot of a cell phone

Description automatically generated

**Foundation Tier**

**Which is better value for money?**

**Instructions**

* Use **black** ink or ball-point pen.
  + **Fill in the boxes** at the top of this page with your name,  
    centre number and candidate number.
* Answer **all** questions.
* Answer the questions in the spaces provided  
  *– there may be more space than you need.*
* You must **show all your working.**
* Diagrams are **NOT** accurately drawn, unless otherwise indicated.
* If your calculator does not have a *π* button, take the value of *π* to be3.142

unless the question instructs otherwise.

**Information**

* The total mark for this paper is **28**. There are **8** questions.
* Questions have been arranged in an ascending order of mean difficulty, as found by all students in the June 2017–November 2019 examinations.
* The marks for **each** question are shown in brackets  
  *– use this as a guide as to how much time to spend on each question.*

**Advice**

* Read each question carefully before you start to answer it.
* Keep an eye on the time.
* Try to answer every question.
* Check your answers if you have time at the end.

**1** The table shows the costs of sending a parcel by the Express service and by the Rapid service.

|  |  |
| --- | --- |
| **Type of service** | **Cost** |
| Express | £15.25 |
| Rapid | £35.38 |

Brendan has to send 12 parcels.

It will be cheaper to send the parcels by the Express service than by the Rapid service.

(*a*)How much cheaper?

£.......................................................

**(3)**

Luke wants to send 21 parcels by the Express service.

He does the calculation 20 × £15 = £300 to estimate the cost.

(*b*)Explain why Luke’s calculation shows the actual cost will be more than £300

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**(1)**

**(Total for Question 1 is 4 marks)**

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**2** Jack’s driving school has two offers.

|  |  |  |
| --- | --- | --- |
| **Offer 1** |  | **Offer 2** |
| First driving lesson free |  | All driving lessons |
| All other driving lessons normal price |  | 5% off the normal price |

The normal price of a driving lesson is £24.

Douglas is going to have 12 driving lessons.

Which is the cheaper offer for 12 driving lessons, Offer 1 or Offer 2?

You must show how you get your answer.

**(Total for Question 2 is 3 marks)**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**3** Suha is going to buy 150 envelopes.

Here is some information about the cost of envelopes in two shops.

|  |  |  |
| --- | --- | --- |
| **Letters2send** |  | **Stationery World** |
| Pack of 25 envelopes for £3.49 |  | Pack of 10 envelopes for £2.10 |
|  |  | Buy 2 packs get 1 pack free |

Suha wants to buy the envelopes as cheaply as possible.

Which shop should Suha buy the 150 envelopes from?

You must show how you get your answer.

**(Total for Question 3 is 4 marks)**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4** A shop sells compost in 20 litre bags and in 40 litre bags.

One day the shop had two special offers for the compost.

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 2 bags for £3.50 |  | 3 bags for £9 |

Which offer is the better value for money?

You must show how you get your answer.

**(Total for Question 4 is 3 marks)**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**5** Food Mart and Jan’s Store sell boxes of the same type of breakfast cereal.

Each shop has a special offer.



Which box of cereal is the better value for money?

You must show your working.

**(Total for Question 5 is 4 marks)**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**6** In London, 1 litre of petrol costs 108.9p

In New York, 1 US gallon of petrol costs $2.83.

1 US gallon = 3.785 litres

£1 = $1.46

In which city is petrol better value for money, London or New York?

You must show your working.

**(Total for Question 6 is 3 marks)**

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**7** Three companies sell the same type of furniture.

The price of the furniture from Pooles of London is £1480

The price of the furniture from Jardins of Paris is €1980

The price of the furniture from Outways of New York is $2250

The exchange rates are

£1 = €1.34

£1 = $1.52

Which company sells this furniture at the lowest price?

You must show how you get your answer.

**(Total for Question 7 is 3 marks)**

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**8** Shirley has a garage.

Here is a plan of her garage floor.



Shirley wants to buy enough paint to cover the garage floor as cheaply as possible.

She can buy her paint from Decor U or from Paint Store.

|  |  |  |
| --- | --- | --- |
| **Decor U**  Floor paint  £3.70 each tin  1 tin covers 12 m2 |  | **Paint Store**  Floor paint  £3.00 each tin  1 tin covers 10 m2 |

From which of these two shops should Shirley buy her paint?

You must show all your working.

**(Total for Question 8 is 4 marks)**

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**TOTAL MARKS FOR PAPER: 28**