

# Mathematics Workbook

Valid from January 2013 to August 2013

Functional Skills Qualification in Mathematics at Entry 2

Learner name

Learner signature and date

Work through the whole book.

- Answer every question.
- You can write or draw to show your answers in the workbook.
- You can use a calculator.

Your tutor may read the questions to you.

Ask your tutor if you do not understand any words.

**You have up to 1 hour to complete the workbook.**

Your tutor may give you objects to help you with the questions.

You will need:

- Pencil
- Ruler
- Rubber

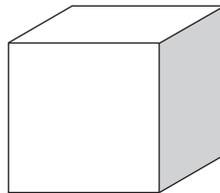
Turn over ►

## 1 Working at a glass factory

Mel works at a glass factory.

He packs glasses into cardboard boxes.

Here is one box.



What is the name of the shape of this cardboard box?

(1)

Write your answer in the box below.

Mel puts one of these labels on each face of the box.

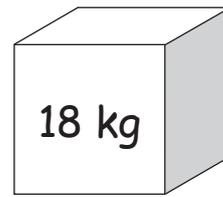
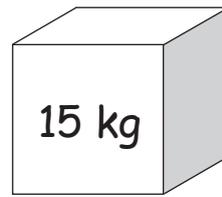
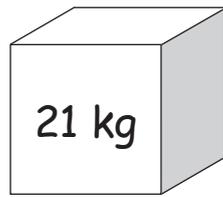
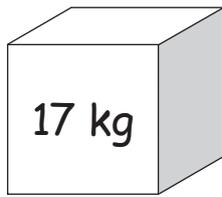


What is the total number of faces on the cardboard box?

(1)

Write your answer in the box below.

Mel weighs these boxes to work out the delivery charges.



**Which box is the heaviest?**

(1)

Tick (✓) the heaviest box.

Mel wraps some parcels with bubble wrap.

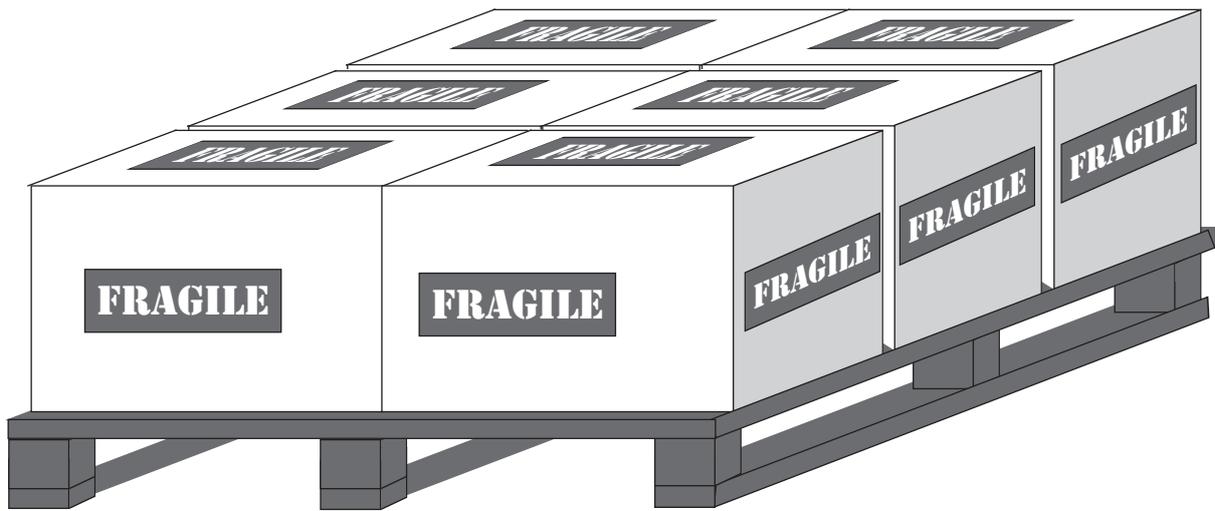
Mel uses 14 m of bubble wrap for a large parcel.  
He uses half as much for a small parcel.

**How much bubble wrap does Mel use for a small parcel?**

**(1)**

Write your answer in the box below.

Mel stacks cardboard boxes in layers on a pallet.



Mel stacks 6 boxes in each layer.  
He stacks 3 layers of boxes on the pallet.

**How many cardboard boxes does Mel stack in total?**

**(2)**

Write your working and your answer in the box below.

## 2 Delivery driver

Mel delivers items from the warehouse.

He must go to these 4 places today.

Place	Time	Order
Locket Close	10.30 am	
The Sands	12.15 pm	
The Green	9.00 am	1st
Iron Walk	11.30 am	

What order should Mel go to the 4 places?

(2)

You can write the order in the box above.

The 1st one has been done for you.

Mel starts work at 8 am.

He has a break for lunch after four and a half hours.

**What time does Mel start his break for lunch?**

(1)

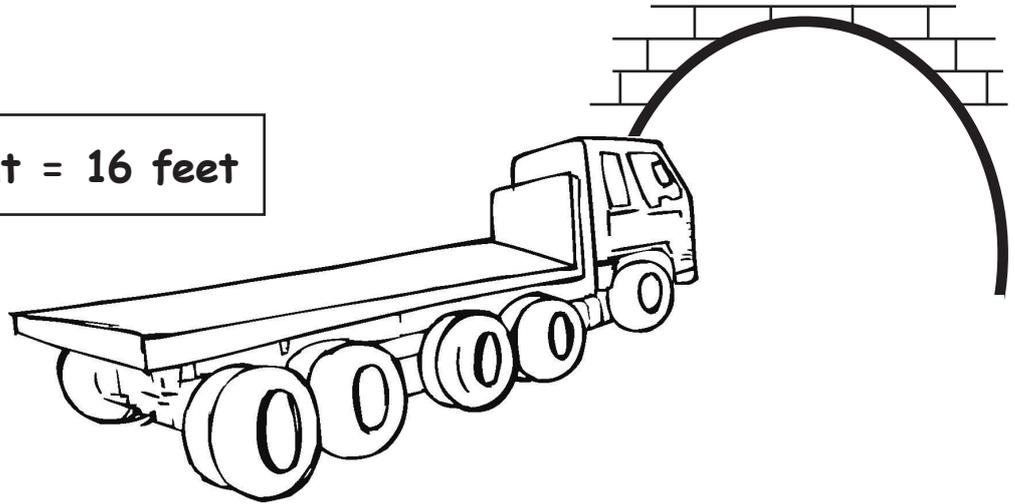
Write your answer in the box below.

Mel must plan his route to avoid low bridges and sharp turns.

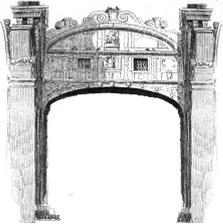
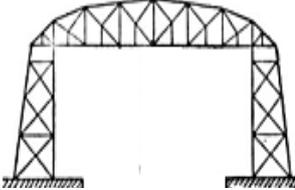
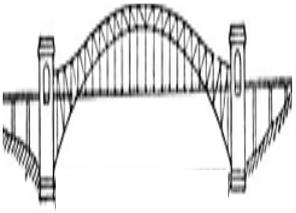
To go under a bridge, the truck height must be less than the bridge height.

Mel has this sign in his delivery truck.

Truck height = 16 feet



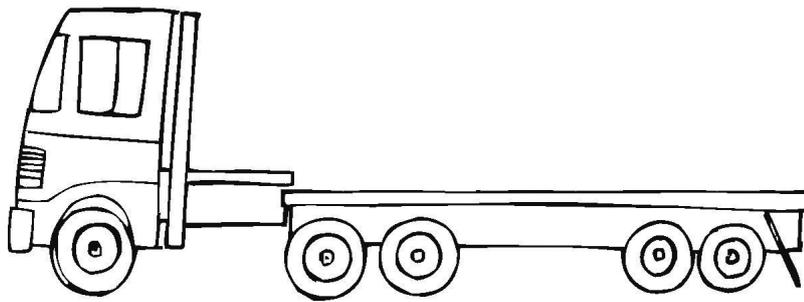
Here are the heights of local bridges.

Old bridge	New bridge	Stone bridge	Iron bridge
			
13 feet	20 feet	15 feet	24 feet
[ ]	[ ]	[ ]	[ ]

Which bridges can the truck go under?

(1)

Tick (✓) the bridges the truck can go under.



The length of the truck is 6 metres.  
The length of the trailer is 8 metres.

**What is the total length of the truck and the trailer?**

**(1)**

Write your answer in the box below.

Mel delivers glasses to a shop in Iron Walk.

These are the shop numbers in Iron Walk.

20 21 22 23 24 25 26 27 28 29 30

**How many shops have odd numbers?**

**(1)**

Write your answer in the box below.

### 3 The factory shop

Here is the price list at the factory shop.

Type of glass	Price for one glass
Highball	£8
Flute	£15
Pint	£9
Half pint	£6
Balloon glass	£25
Stem glass	£20
Tumbler	£22

Nina wants to buy 3 glasses.

She wants 3 different types of glass.

**Choose glasses for Nina to buy.**

**How much will the 3 glasses cost in total?**

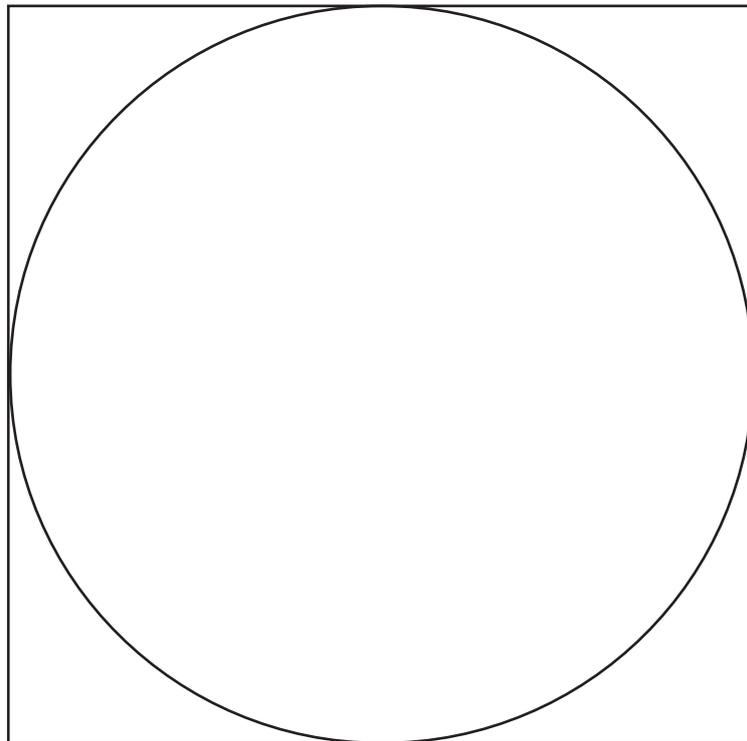
(2)

Tick (✓) the 3 types of glass you choose.

Write your working and your answer in the box below.

The factory shop sells each glass in a cardboard box.

The diagram shows the top of a glass tumbler in its box.



**What is the width of the cardboard box to the nearest centimetre?**

**(1)**

Write your answer in the box below.

Nina buys a cup of tea for 75p from the cafe.  
She pays with a £1 coin.

**How much change should Nina get?**

(2)

Write your working and your answer in the box below.

**Check your answer by adding the change to 75p**

(1)

Write your check in the box below.