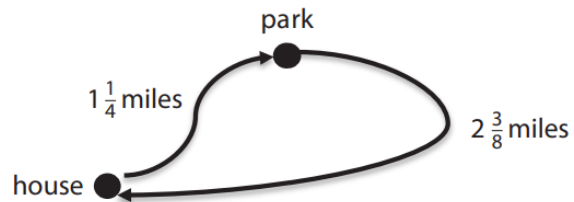**Non-calculator Questions**

Edexcel

1.

Ola will run from her house to a local park and back to her house.
She sees this sketch of the route she will take.

park

$1\frac{1}{4}$ miles

$2\frac{3}{8}$ miles

house

What is the total distance of the route Ola will run?
Give your answer as a mixed number.

You **must** show your working.

(3)

miles

2.

Work out $\frac{4}{5} - \frac{3}{8}$

(2)

NCFE

3.

Knitting needles are long, thin cylinders with a point at one or both ends.

The size of a knitting needle is the diameter of the cylinder in mm

For example, these needles have a diameter of $2\frac{1}{4}$ mm

Calculate the difference in diameter between $6\frac{1}{2}$ mm needles and $3\frac{3}{4}$ mm needles.

Give your answer as a mixed number.

[1 mark]

Your answer: _____ **mm**

4.

The employees looked at the office plans and held a vote on which office they prefer.

- A third voted for Office A.
- Two-fifths said they did not mind which office was chosen.
- The rest voted for Office B.

What fraction of employees voted for Office B?

[2 marks]

Your answer:

5.

Jessie is the manager of a shopping centre.

She knows that:

- $\frac{3}{5}$ of the shops sell clothes

- $\frac{1}{8}$ of the shops sell electronic goods

- all of the other shops sell food.

What fraction of the shops sell food?

[2 marks]

Your answer:

City & Guilds

6.

$$2\frac{1}{2} + 3\frac{3}{4} =$$

(tick one box)

A $5\frac{1}{4}$ ☐

B $5\frac{4}{6}$ ☐

C $6\frac{1}{4}$ ☐

D $6\frac{4}{6}$ ☐

(1 mark)

7.

$$\frac{1}{2} - \frac{2}{7} =$$

Give your answer in its simplest form.

☐
―――
☐

(1 mark)

8.

$$\frac{11}{8} - \frac{1}{16} =$$

(*tick one box*)

A $\frac{5}{8}$ ☐

B $1\frac{5}{8}$ ☐

C $1\frac{5}{16}$ ☐

D $2\frac{5}{16}$ ☐

(1 mark)

9.

Which one of the following works out to the largest number?

(*tick one box*)

A $\frac{3}{4}$ x 8 =   ☐

B $\frac{2}{6}$ x 12 =   ☐

C $\frac{3}{2}$ x 10 =   ☐

D $\frac{3}{12}$ x 36 =   ☐

(1 mark)

Highfield

10.

You volunteer for a charity that provides clothing.

You are sending a shipment:

- One-sixth of the items are jackets
- Two-fifths of the items are trousers
- the remainder are tops

What fraction of the items are tops?

Show your working out and write the answer in the box below.   *(3 marks)*

Answer: _____

11.

You work for Highfield Advertising and Promotions. You are sending out new promotional material to customers.

- One third are leaflets
- Two fifths are brochures
- The remainder are catalogues

What fraction of the promotional materials are catalogues?

Show your working out and write your answer in the box below.   *(3 marks)*

Answer: _____

Open Awards

12.

The table below shows the distances walked by Jay each day in a week.

Day of week	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Distance walked	$1\frac{1}{2}$ miles	$\frac{3}{4}$ mile	$\frac{1}{2}$ mile	$\frac{1}{3}$ mile	$\frac{1}{3}$ mile	$\frac{3}{4}$ mile	0 miles

What was the total distance Jay walked over the whole week?   (2 marks)

Show your calculations and/or workings out here:

Write your answer in this box.

13.

Put these fractions in order of size, smallest to largest:

$$\frac{4}{3} \qquad \frac{3}{4} \qquad \frac{3}{8} \qquad \frac{5}{8} \qquad \frac{7}{6}$$

(1 mark)

Show your calculations and/or workings out here:

Write your answer in this box.

Calculator Questions

NCFE

1.

Kay and Mo are employed by CHAD as fundraisers.

They are given targets:

- Kay must raise funds of at least $3\frac{2}{5}$ times her salary.

- Mo must raise funds of at least $\frac{10}{3}$ times his salary.

Which is larger, $3\frac{2}{5}$ or $\frac{10}{3}$?

Show how you decide.

[2 marks]

Your answer:

City & Guilds

2.

> Which one of the following lists is in decreasing order?

(tick one box)

A $\dfrac{315}{100}$ $\dfrac{1500}{924}$ $\dfrac{200}{57}$ $3\dfrac{2}{7}$ ☐

B $\dfrac{200}{57}$ $3\dfrac{2}{7}$ $\dfrac{315}{100}$ $\dfrac{1500}{924}$ ☐

C $\dfrac{200}{57}$ $\dfrac{1500}{924}$ $3\dfrac{2}{7}$ $\dfrac{315}{100}$ ☐

D $3\dfrac{2}{7}$ $\dfrac{1500}{924}$ $\dfrac{315}{100}$ $\dfrac{200}{57}$ ☐

(1 mark)

3.

> $1\dfrac{3}{8} + 3\dfrac{9}{16} =$

(tick one box)

A $4\dfrac{1}{2}$ ☐

B $4\dfrac{3}{8}$ ☐

C $4\dfrac{3}{4}$ ☐

D $4\dfrac{15}{16}$ ☐

(1 mark)

Highfield

4.

Calculate $2\frac{5}{8} + \frac{11}{16}$

Give your answer as a mixed number.

Show your working out and write the answer in the box below.   *(2 marks)*

Answer: _____

5.

Which of the following values is the largest?

$$\frac{850}{1000} \qquad 2\frac{1}{9} \qquad \frac{7}{3} \qquad 2\frac{7}{550}$$
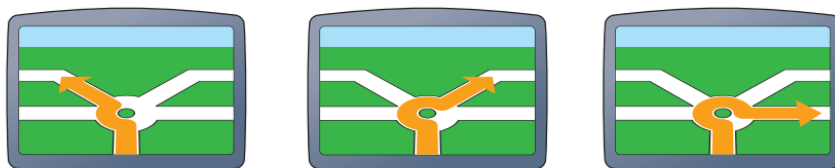
Write the answer in the box below.   *(1 mark)*

Answer: _____

6.

You are about to set off on a delivery. You are looking at the possible routes and how long each will take.

	Route A	Route B	Route C
Regular journey time:	105 minutes	70 minutes	60 minutes
Today's traffic forecast Warehouse to Delivery point:	Only 7/9 of regular journey time	Add 2/6 to regular journey time	Add 42% to regular journey time
Today's traffic forecast Delivery point back to Warehouse:	Only 8/9 of regular journey time	Add 1/5 to regular journey time	Add 28% to regular journey time

You will start at your warehouse, go to the delivery point, then return to the warehouse.

Considering the traffic forecasts for the journey to and from the delivery point, which route will be the fastest?

Show your working out and write the answer in the box below. *(7 marks)*

Answer: _____

7.

Which of the following is greater?

$$\frac{3}{8} \text{ of } 1000 \quad \text{or} \quad \frac{5}{12} \text{ of } 900$$

Show your working out and write the answer in the box below. *(2 marks)*

Answer: _____

AQA

8.

Work out $\quad 5\frac{3}{4} - 1\frac{1}{8}$

[1 mark]

Answer _____

9.

Calculate $\quad 1\dfrac{3}{4} + 2\dfrac{4}{5}$

[1 mark]

_____

_____

_____

Answer _____