

Name:

Exam Style Questions

Pictograms



Equipment needed: Ruler, pencil, calculator, pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Videos 161, 162



Answers and Video Solutions



1.

Leo owns a car dealership.



The table shows the number of cars sold each day last week.

Day	Cars Sold
Monday	4
Tuesday	6
Wednesday	3
Thursday	8
Friday	7

Draw a pictogram to show this information.
Include a key.

Key: ○ means 2 cars

Monday	○ ○
Tuesday	○ ○ ○
Wednesday	○ 1
Thursday	○ ○ ○ ○
Friday	○ ○ ○ 1

(3)

2. Sophie asks 20 of her friends to choose their favourite sport.



Their replies are

~~Rugby~~ ~~Football~~ ~~Rugby~~ ~~Hockey~~ ~~Cricket~~
~~Football~~ ~~Football~~ ~~Rugby~~ ~~Hockey~~ ~~Football~~
~~Rugby~~ ~~Cricket~~ ~~Hockey~~ ~~Football~~ ~~Football~~
~~Football~~ ~~Rugby~~ ~~Football~~ ~~Football~~ ~~Rugby~~

- (a) Complete the tally and the frequency columns in the table below.

Sport	Tally	Frequency
Rugby	1	6
Football		9
Hockey		3
Cricket		2

(2)

- (b) Draw a pictogram to show these results.

Key: ○ represents 2 people

Rugby	○ ○ ○
Football	○ ○ ○ ○ ○
Hockey	○ ○
Cricket	○

(2)

(c) Sort the sports in order of popularity, starting with the most popular.

Football

Rugby

Hockey

Cricket

(1)

3. Erin is selling cupcakes to raise money for charity.



The pictogram shows some information about the cupcakes sold.

Chocolate	4 8 12 16
Coffee	1 1/4
Lemon	2 1/2
Strawberry	3

Key:



represents 4 cupcakes

(a) What was the least popular flavour of cupcake?

Coffee

(1)

(b) How many chocolate cupcakes were sold?

16

(1)

(c) How many more strawberry than lemon cupcakes were sold?

12

10

$$12 - 10 = 2$$

2

(1)

4.



The table shows information about the number of phone calls received by some students last week.

Student	Frequency
Patrick	12
Andrew	20
David	6
George	9

Show this information on a pictogram.

Patrick	
Andrew	
David	
George	

Key: represents 4 phone calls

(3)

5.



The pictogram shows the amount of money raised by students in some tutor groups at a school.

Key: ○ = £10

Tutor group		Raised
S	○ ○ ○ ○ ○ ○ ○	£60
T	○ ○ ○	£30
E	○ ○ ○ ○ ○	£45
P	○ ○ ○ ○	£35

(a) Complete the raised column.

(2)

(b) Complete the pictogram for tutor group E.

(2)

(c) How much money was raised altogether?

$$60 + 30 + 45 + 35 = £170$$

£ 170








(1)

6.

The pictogram shows the books Claire read last year.



Key  represents 8 books

Romance	 	16
Crime	 	10
Horror	 	12
Factual		6

(a) How many romance books did Claire read?

16

(1)

(b) How many horror books did Claire read?

12

(1)

(c) How many books in total did Claire read last year?

$$\begin{array}{r}
 16 \\
 10 \\
 12 \\
 + 6 \\
 \hline
 44
 \end{array}$$

44

(2)

7. The number of hours of sunshine on a day, across a number of cities is shown below.



○ = 2 hours of sunshine

Norwich	○ ○ ○ ○ ○ ◐	11
Dublin	○ ○ ○ ○	8
Belfast	○ ○ ○ ◐	7
Aberdeen	○ ○	4
Cardiff	○ ○ ○ ○	8
Glasgow	◐ ○ ○ ○ ◐	

- (a) How many more hours of sunshine was there in Norwich than Belfast?

$$11 - 7$$

4hours
(1)

In Glasgow there was 9 hours of sunshine.

- (b) Complete the pictogram.

(2)

8. Stefan records the number of cars in a car park at 9am each weekday last week.



He draws this pictogram to represent his results.

Key: ○ represents 10 cars

Monday	○ ○	20
Tuesday	○ ○ ○	30
Wednesday	○	10
Thursday	○ ○ ○ ◐	35
Friday	○ ○ ◑	27.5

Write down a criticism of Stefan's pictogram.

As three-quarters of 10 is 7.5, Stefan's pictogram says 27.5 cars were sold on Friday - this is not possible. He should change his key.

(1)

9. A box contains blue, green, pink and yellow beads.



The pictogram shows information about the number of each colour in the box.

Key: ○ represents 4 beads

Blue	○ ◐	6
Green	○ ○ ○ ○	16
Pink	○ ○ ○ ◐	13
Yellow	◑ ◐	5

There is a total of 40 beads in the box.

Complete the pictogram.

$$6 + 16 + 13 = 35$$

(3)

10. Eirini is a GP.



The pictogram shows information about the number of patients she sees each day last week.

Key: ○ represents 4 patients

Monday	○ ○ ○	12
Tuesday	○ ○ ○ ○ ◐	18
Wednesday	◑ ◑ ◐	9
Thursday	○ ○ ○ ○	16
Friday	○ ○ ◑	11

On Wednesday, Eirini saw 9 patients.

(a) Show this on the pictogram.

(1)

Each appointment lasts 15 minutes.

(b) Work out the total time Eirini spent setting patients last week.
Include suitable units.

$$12 + 18 + 9 + 16 + 11 = 66$$

$$66 \times 15 = 990 \text{ minutes}$$

$$990 \div 60 = 16.5 \text{ hours}$$

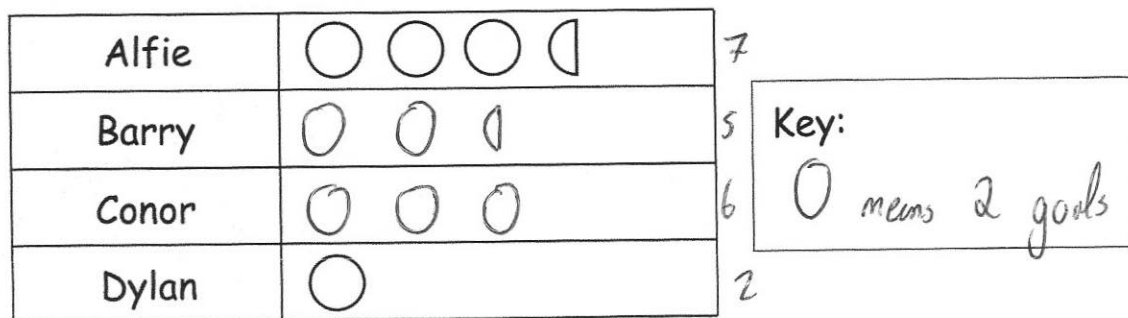
16.5 hours

(3)

11. Alfie, Barry, Conor and Dylan play for the same football team.



The pictogram shows some information about the number of goals they each scored last season.



The four players scored a total of 20 goals.
Alfie scored 7 goals.

Conor scored one more goal than Barry.

Complete the pictogram and key.

$$7 + 2 = 9$$

$$20 - 9 = 11$$

$$\text{Conor} = 6 \text{ goals}$$

$$\text{Barry} = 5 \text{ goals}$$

(4)

12. A bakery sells bread rolls.



The pictogram, without a key, shows how many rolls were sold each day, over four days.

Wednesday	○ ○ ○ ○ ○
Thursday	○ ○ ○ ○ ◐
Friday	○ ○ ○ ○ ○ ○
Saturday	○ ○ ○

54 bread rolls were sold on Thursday.

Work out how many bread rolls were sold on Saturday.

$$54 \div 4.5 = 12$$

○ means 12 rolls

$$12 \times 3 = 36$$

36

(3)

13.












Finn has a bag containing 72 sweets.



There are four flavours of sweets: apple, blueberry, cherry and lemon.

The pictogram shows some information about number of apple and lemon sweets in the bag.

Key:  represents 8 sweets

Apple	    	36
Blueberry	  	20
Cherry		4
Lemon	 	12

Finn counts a total of 48 apple and lemon sweets.

There are 20 blueberry sweets.

Complete the pictogram and key.

$$\begin{array}{rcl}
 \text{Apples} & \rightarrow & 4.5 \text{ squares} \\
 \text{lemon} & \rightarrow & 1.5 \text{ squares} \\
 & + & \\
 & \hline
 & & 6 \text{ squares}
 \end{array}$$

$$48 \div 6 = 8 \text{ (1 square)}$$

$$\text{blueberry} \rightarrow 2.5 \text{ squares}$$

$$36 + 20 + 12 = 68$$

$$72 - 68 = 4$$

(4)