

**Cambridge
Primary
Checkpoint**

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
Cambridge Primary Checkpoint

CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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MATHEMATICS

0845/02

Paper 2

April 2012

45 minutes

Candidates answer on the Question Paper.

Additional Materials:

Pen
Pencil
Ruler

Protractor

Calculator

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces at the top of this page.
Write in dark blue or black pen.

DO NOT WRITE IN ANY BARCODES.

Answer **all** questions.

The number of marks is given in brackets [] at the end of each question or part question.

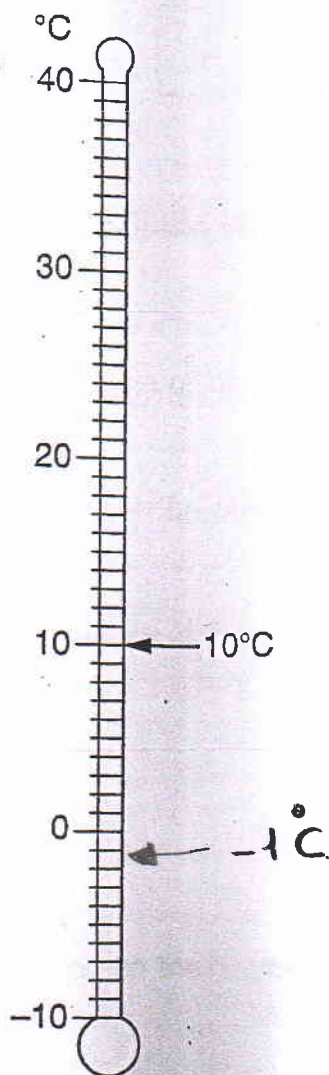
You should show all your working in the booklet.

The total number of marks for this paper is 40.

This document consists of 17 printed pages and 3 blank pages.



1 Here is a thermometer. The arrow is pointing to 10°C .



Draw an arrow on the thermometer pointing to -1°C .

[1]



2 John-Paul has 6 number cards.



Use each card **only once** to complete these statements.

$$\boxed{5} \times \boxed{4} = \text{a multiple of 10}$$

$$\boxed{6} \times \boxed{7} = \text{a number between 40 and 45}$$

$$\boxed{8} \times \boxed{3} = \text{a multiple of 6}$$

[2]

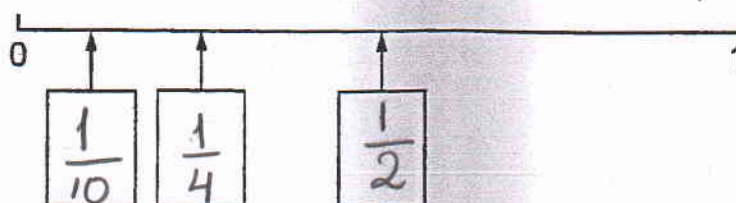
3 Here are three fractions.

$$\frac{1}{2}$$

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

$$\frac{1}{10}$$

Write each fraction in the correct box on the number line.



[1]



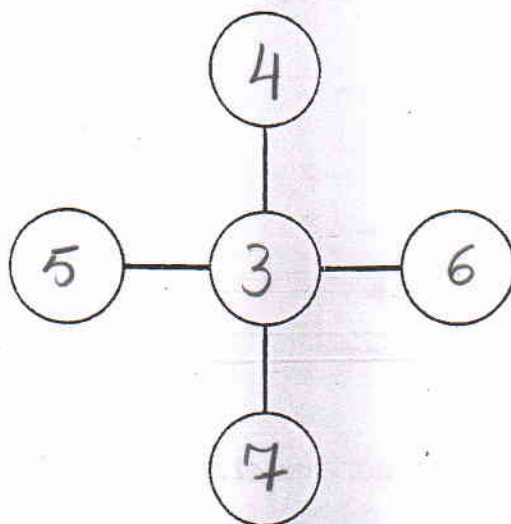


4 Here are five number discs.



Use each disc **once** to complete the cross pattern.

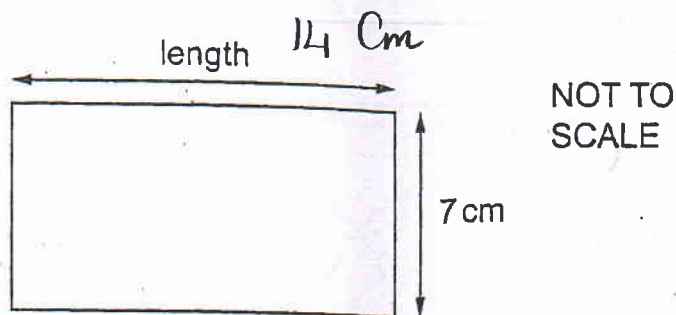
The total going across must be the same as the total going down.



[1]



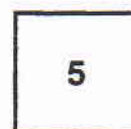
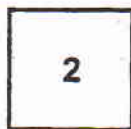
- 5 Here is a rectangle. It is **twice** as long as it is wide.



What is the **perimeter** of the rectangle?

$$\begin{aligned} \text{Per.} &= 2 \times (L + W.) \\ &= 2 \times (14 + 7) \\ &= 2 \times 21 = 42 \dots \text{cm} \quad [1] \end{aligned}$$

- 6 Here are four digit cards.



Anna chooses three of these cards to write three-digit numbers.

Write **all** the three-digit numbers that Anna could make between 350 and 450.

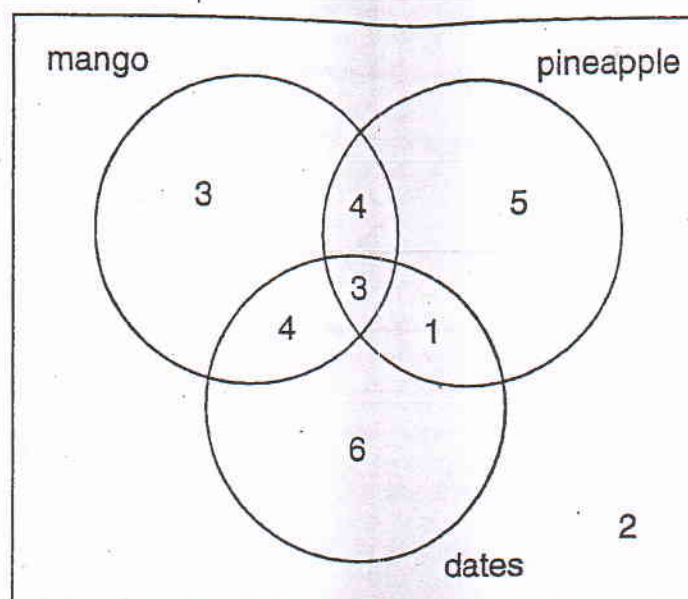
352, 354, 423, 432, 435, 425

[2]



- 7 Fatima asked the students in her class which fruits they enjoy eating.

The Venn diagram shows the results of her survey.



- (a) How many students enjoy both mangoes and pineapples?

$$\underline{\hspace{10em} 4 + 3 = 7 \hspace{10em}} \quad [1]$$

- (b) How many students took part in the survey?

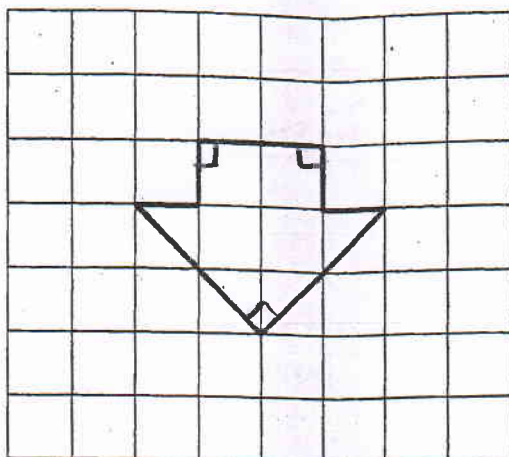
$$\begin{aligned} & \underline{\hspace{10em} 3 + 4 + 3 + 4 + 1 + 5 + 6 + 2 \hspace{10em}} \quad [1] \\ & = 28 \end{aligned}$$





7

8 Here is a shape.



How many of the inside angles of the shape are right angles?

..... 3 [1]

9 Put these numbers in order starting with the largest.

340 -620 380 -93 -175

380 340 -93 -175 -620

largest

smallest

[1]

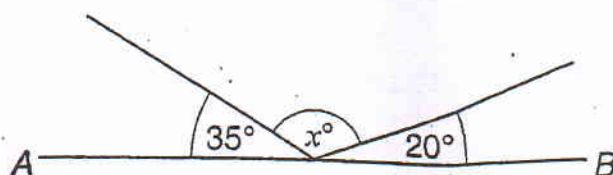
10 Write the same number in both boxes to make this calculation correct.

$$\boxed{8} \times \boxed{8} = 64$$

[1]



- 11 AB is a straight line.



NOT TO
SCALE

Calculate the size of angle x .

Do not use a protractor (angle measurer).

$$180 - (35 + 20)$$

$$180 - 55$$

$$= 125^\circ \quad [1]$$

- 12 What is the missing number?

$$\boxed{120} \overset{= x}{\div 5} = 24$$

[1]

- 13 Here are four statements about odd and even numbers.
One statement **must** be wrong.

Put a cross (*) in the box by the **wrong** statement.

The sum of three even numbers is 16

The sum of three odd numbers is 20

The sum of two odd numbers is 10

The sum of two even numbers is 18

[1]



- 14 (a) Write this mixed number as an improper fraction.

$$\begin{array}{c} \textcircled{20} + 3 \\ \uparrow \times 4 \\ 5 \frac{3}{4} = \end{array}$$

$$\frac{23}{4}$$

[1]

- (b) Write this improper fraction as a mixed number.

$$\frac{17}{5} =$$

$$3 \frac{2}{5}$$

$$\begin{array}{r} 3 \\ 5 \overline{)17} \\ \underline{-15} \\ 2 \end{array}$$

[1]

- 15 Here are 7 numbers.
Put a ring around **three** numbers that add up to 200.

2

4

 $\textcircled{8}$

16

32

 $\textcircled{64}$ $\textcircled{128}$

[1]

- 16 Look at these four calculations.

One is **wrong**.

$$9.5 \times 3 = 28.5$$

$$3.9 \times 9 = 35.1$$

$$\textcircled{\times} 2.6 \times 4 = 12.4$$

$$4.2 \times 6 = 25.2$$

Put a cross (*) through the incorrect calculation.

[1]



17 Here are four fractions.

$$\frac{1}{50}$$

$$\frac{50}{100}$$

$$\frac{100}{50}$$

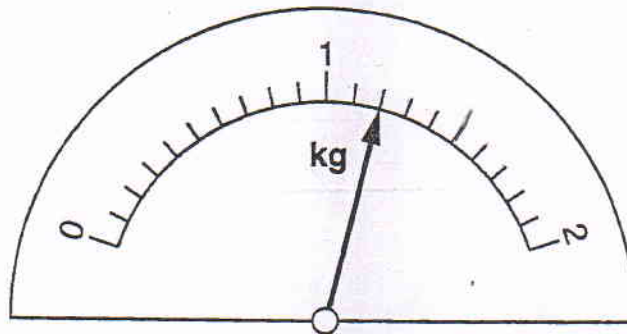
$$\frac{1}{5}$$

Which fraction is equivalent to 0.5?

$$\frac{50}{100}$$

..... [1]

18 Here is a scale showing the mass of a bunch of bananas.



What is the mass of the bananas?

..... 1.2 kg [1]

(1 kg and 200 gm)



- 19 Anna goes to see a film. The digital clock shows the time the film starts.

18:15

The film ends at 8:50 pm.

How long does the film last?

2 hours and 35 min. [1]

- 20 Here is a sequence of numbers.

Write the missing number in each box.

81, 64, 49, 36, 25, 16, 9

$\underbrace{\quad\quad\quad}_{-17} \nearrow$
 $\underbrace{\quad\quad\quad}_{-15} \nearrow$
 $\underbrace{\quad\quad\quad}_{-13} \nearrow$
 $\underbrace{\quad\quad\quad}_{-11} \nearrow$
 $\underbrace{\quad\quad\quad}_{-9} \nearrow$
 $\underbrace{\quad\quad\quad}_{-7} \nearrow$

[2]

- 21 A glass holds 225 millilitres of water.



Peter drinks 1.8 litres of water during a day.

How many glasses of water does he drink during the day?

$$1.8 \text{ L} = 1800 \text{ mL}$$

$$1800 \div 225 =$$

..... 8 glasses [1]

- 22 Lewis is 0.9 metres tall.
Tim is 0.15 metres taller than Lewis.

How tall is Tim?

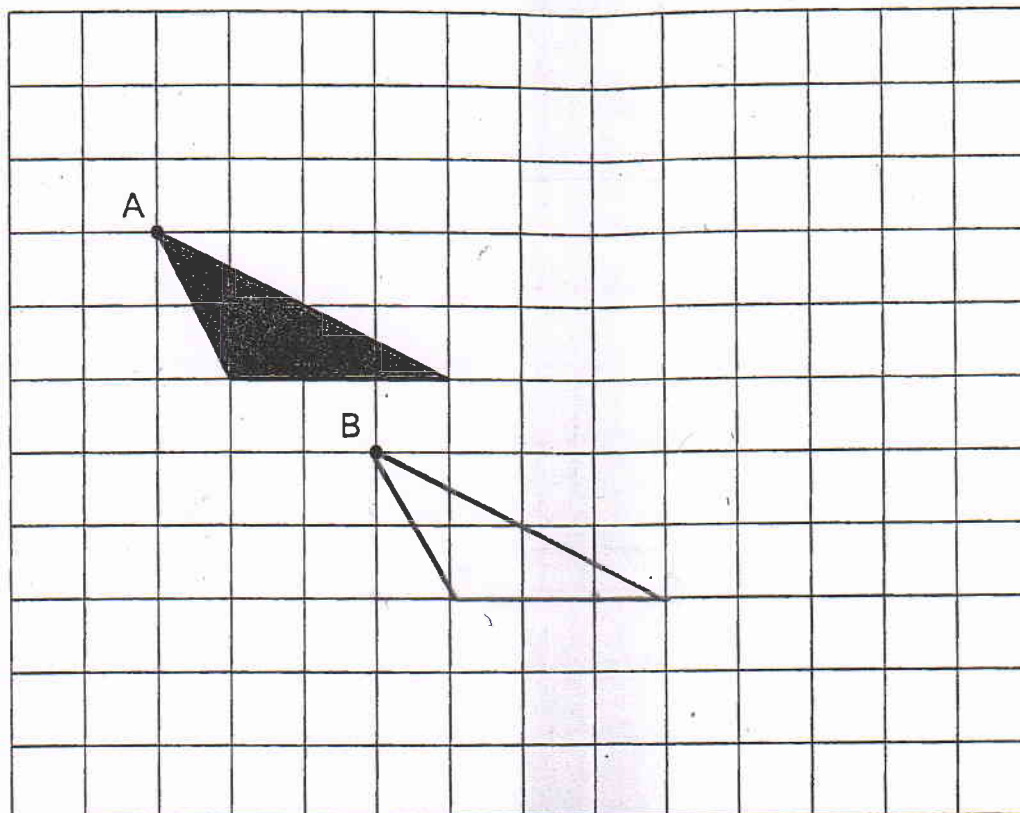
$$\begin{array}{r} \textcircled{1} \\ 0.90 \\ + 0.15 \\ \hline 1.05 \end{array}$$

..... metres [1]



- 23 Here is a triangle on a square grid.
The triangle is translated so that point A moves to point B.

Draw the triangle at its new location.



[1]

- 24 Use the digits 3, 5 and 6 only to complete this calculation.
You can use each digit more than once.

$$\begin{array}{|c|c|c|} \hline 6 & 3 & 5 \\ \hline \end{array} + \begin{array}{|c|c|c|} \hline 3 & 6 & 5 \\ \hline \end{array} = 1000$$

[1]



25 Complete the following.

$$35 \times 16 = 70 \times$$

(560)

8

[1]

26 Here are four digit cards.

3

5

4

6

Use each of these cards to make a total that is a multiple of 5. Each card must only be used once.

3	4	+	5	6	= 90
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[1]

27 What is $\frac{7}{10}$ of 650?

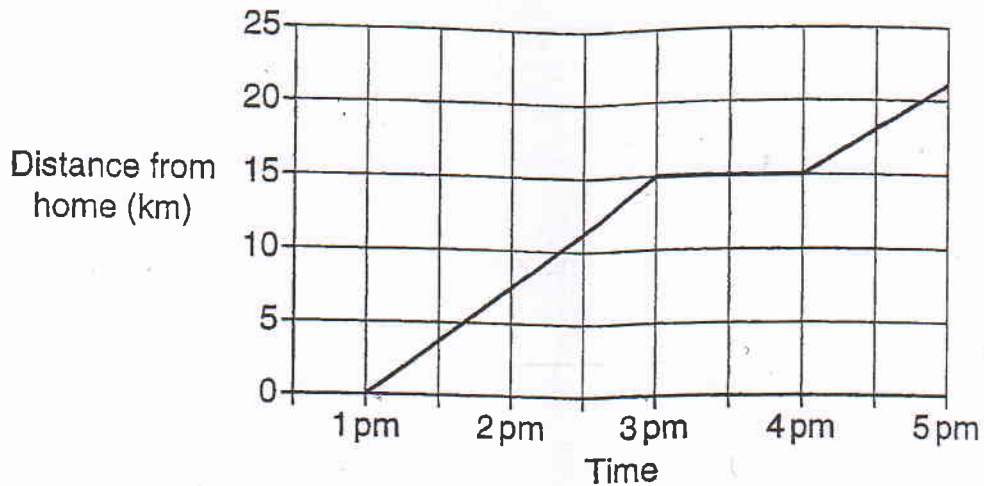
$$\frac{7}{10} \times 650 = \frac{4550}{10}$$

$$= 455$$

[1]



- 28 The graph shows Hakim's cycle journey between 1 pm and 5 pm.



- (a) How far does he travel between 1 pm and 3 pm?

..... 15 km [1]

- (b) What might he be doing between 3 pm and 4 pm?

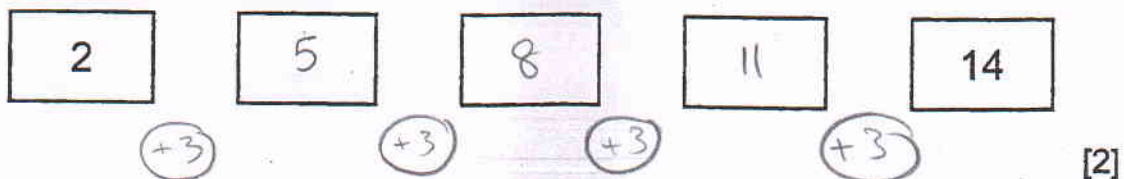
..... Resting [1]

- 29 William makes a sequence of five numbers.

The first number is 2.
The last number is 14.

His rule is to add the same number each time.

Write in the missing numbers.



- 30 Choose three different prime numbers to make this calculation correct.

$$\boxed{2} + \boxed{3} + \boxed{5} = 10$$

[1]

- 31 Circle the quadrilateral which has only one pair of opposite parallel sides.

parallelogram

kite

rhombus

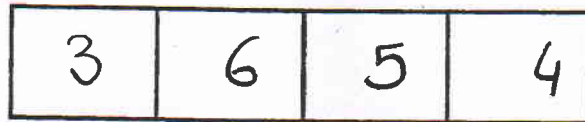
trapezium

[1]

- 32 Here are four digit cards.



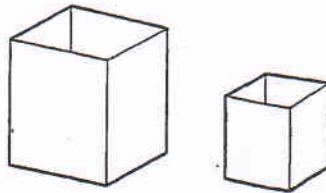
Use each digit card once to make the number nearest to 4000.



[1]



33 Victoria has 2 boxes.



One box is three times heavier than the other.
The total mass is 500 grams.

What is the mass of each box?

$$\begin{array}{r}
 b_1 \quad b_2 \quad : \quad \text{total} \\
 1 \quad : \quad 3 \quad : \quad 4 \\
 : \quad : \quad : \quad 500
 \end{array}$$

$$\begin{array}{r}
 500 \times 3 \\
 \hline
 4
 \end{array}$$

375 grams and

$$\begin{array}{r}
 500 \times 1 \\
 \hline
 4
 \end{array}
 = 125 \text{ grams}$$

[1]

