



Year 5 Mid-year Reasoning: Test B

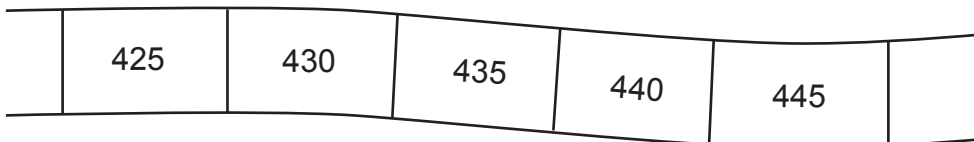
Name	
Class	
Date	

1. Circle the **two** fractions that are less than $\frac{1}{2}$

$$\frac{5}{8} \quad \frac{4}{10} \quad \frac{2}{8} \quad \frac{7}{10}$$

1 mark

2. Here is part of a number sequence. The numbers increase by the same amount each time.



The sequence continues.

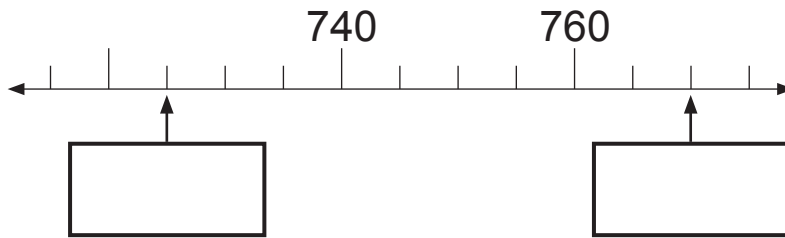
Circle **all** of the numbers below that would appear in the sequence.

750 815 999 1,005 2,552

1 mark

3. Here is part of a number line.

Write the two missing numbers in the boxes.



1 mark

1 mark

4. Circle **three** numbers that add to make a **multiple** of **10**

21 22 23 24 25 26 27 28 29

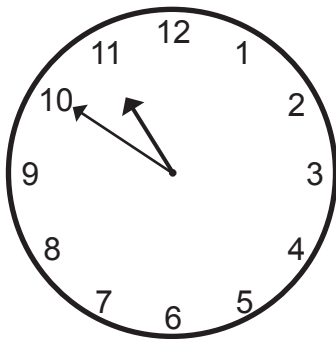
1 mark

5. Write in the missing number.

$$20 \times 10 = 25 \times \boxed{}$$

1 mark

6. Playtime starts at



It finishes at 11:15

How many minutes long is playtime?

minutes

1 mark

7. Match each fraction to the percentage which has the same value.

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

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

$$\frac{3}{10}$$

$$\frac{20}{25}$$

80%

50%

10%

20%

30%

40%

2 marks

9. It is estimated that the population of a town will increase by **10,000** every year.
In **2015** the population of the town was **236,000**

What will the population of the town be in **2021**?

1 mark

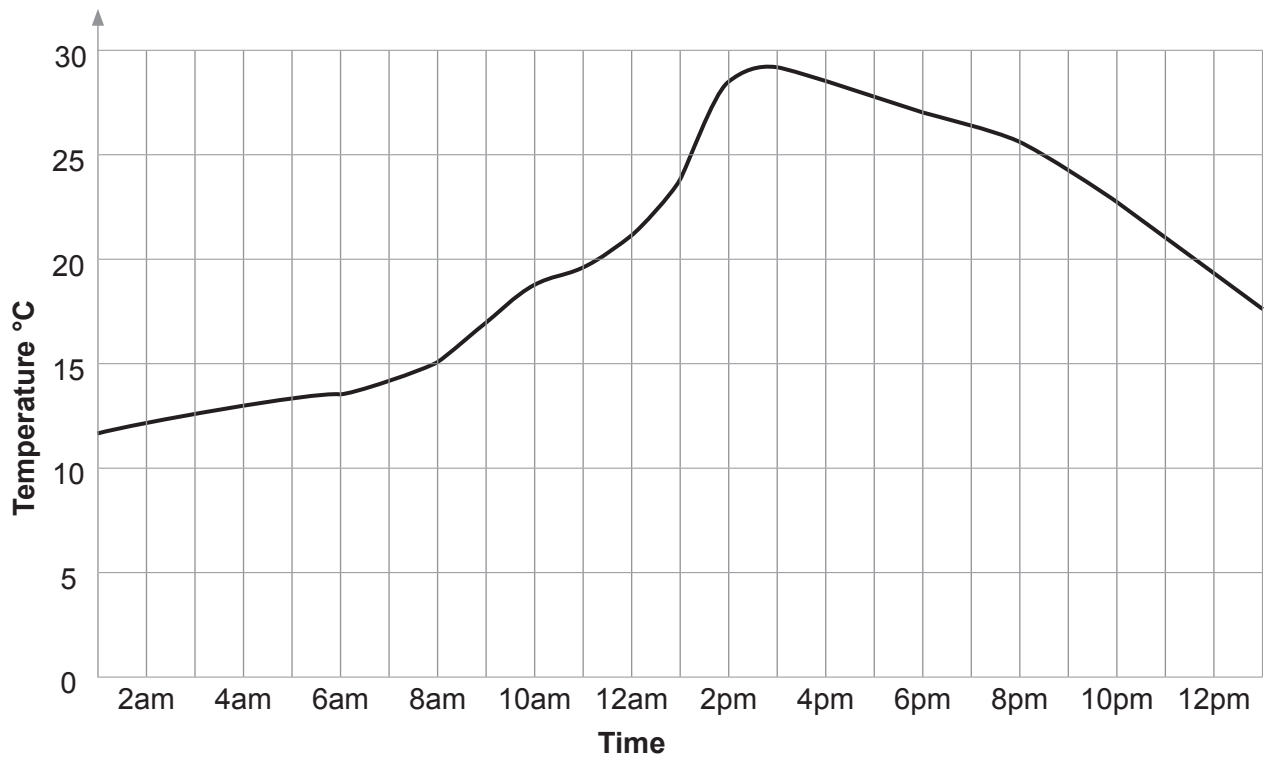
10. Complete the equivalent fractions.

$$\frac{\square}{6} = \frac{2}{3} = \frac{6}{\square}$$

1 mark

1 mark

11. The line graph below shows the temperature on the hottest day of the year in 1994.



What was the temperature at 4 am?

 °C

1 mark

How much did the temperature increase between 2 am and 2 pm?

 °C

1 mark

12. Use the table to work out the approximate equivalents.

1 inch is about 2.5 cm
1 pint is about 570 ml
1 pound is about 450 g

Circle the correct answers.

10 inches is about...

2.5 mm

25 mm

250 mm

2500 mm

10 pints is about...

5.7 litres

57 litres

57 ml

5.7 ml

10 pounds is about...

0.45 kg

4.5 kg

45 kg

450 kg

2 marks

13. A family eats $\frac{3}{5}$ of a loaf of bread every day.

How many loaves of bread will they eat in 10 days?

loaves

1 mark

14. Write these numbers in order, starting with the **smallest**.

5.1

5

5.4

5.14

5.04

smallest

1 mark

15. Jason collects **20p** coins.
Holly collects **5p** coins.
They have each collected **£6**

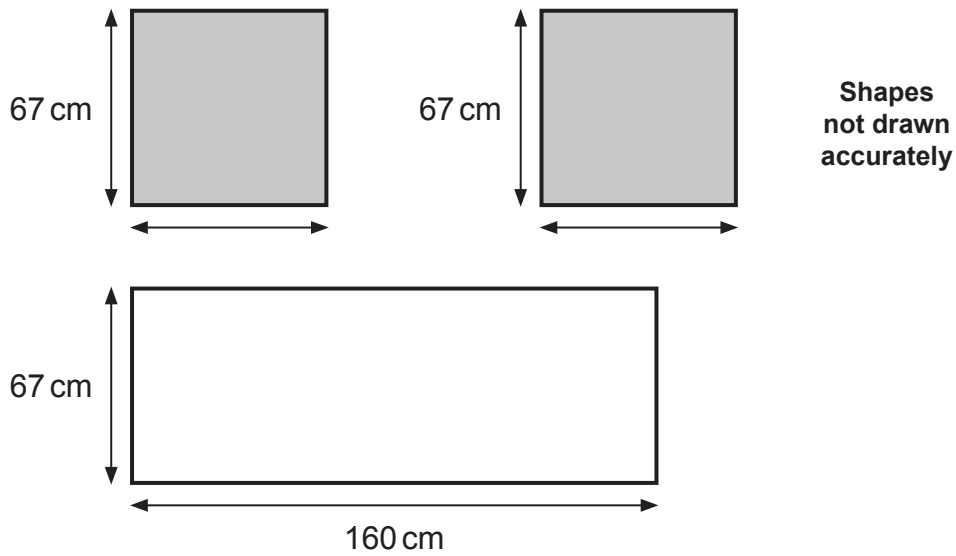
How many **more** coins does Holly have than Jason?

Show your method

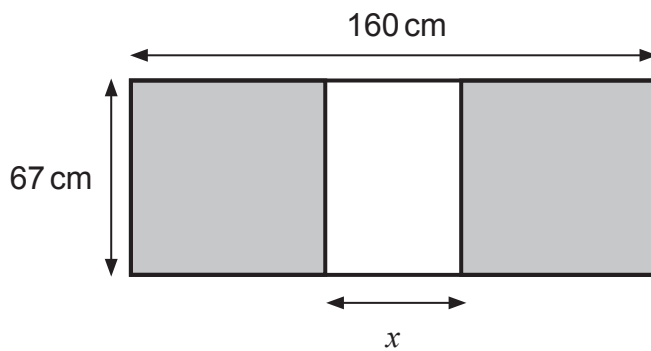
A large grid for showing the method to solve the problem. The grid is 20 columns wide and 10 rows high. A small rectangular box is drawn at the bottom right of the grid, spanning 8 columns and 2 rows.

2 marks

16. Mia has two identical squares and a rectangle.



She puts the two squares on top of the rectangle.



What is the length of x ?

Show your method

cm

2 marks

17.

Circle the decimal that equals $\frac{38}{1000}$

0.00038

0.0038

0.38000

0.038

0.38

1 mark

18.

Holly, Jason and Mia play two games.

Winning game A is worth **50** points.Winning game B is worth **100** points.

The table shows the points they have.

Complete the table for Jason and Mia.

Player	Number of wins		Total points
	Game A	Game B	
Holly	2	1	200
Jason	5	4	
Mia		5	950

1 mark

19. Write the missing numbers to make the calculations correct.

$$\frac{\square}{5} + \frac{2}{10} = \frac{4}{5}$$

1 mark

$$\frac{1}{4} + \frac{\square}{8} = \frac{7}{8}$$

1 mark

20. Jason drinks **320 ml** of milk every day.

How many **litres** of milk does he drink in **7** days?

litres

1 mark

21. Three **different** numbers add up to **100**
All the numbers are **greater than 30**
Two of the numbers are **odd**.

Write what the three numbers could be.

$$\square + \square + \square = 100$$

1 mark

22. $17 \times 19 = 323$

Use the fact above to find the missing numbers below.

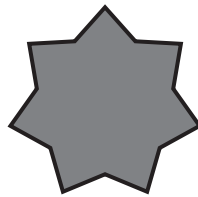
$170 \times 190 = \boxed{}$

$3,230 \div 19 = \boxed{}$

$1,700 \times \boxed{} = 32,300$

2 marks

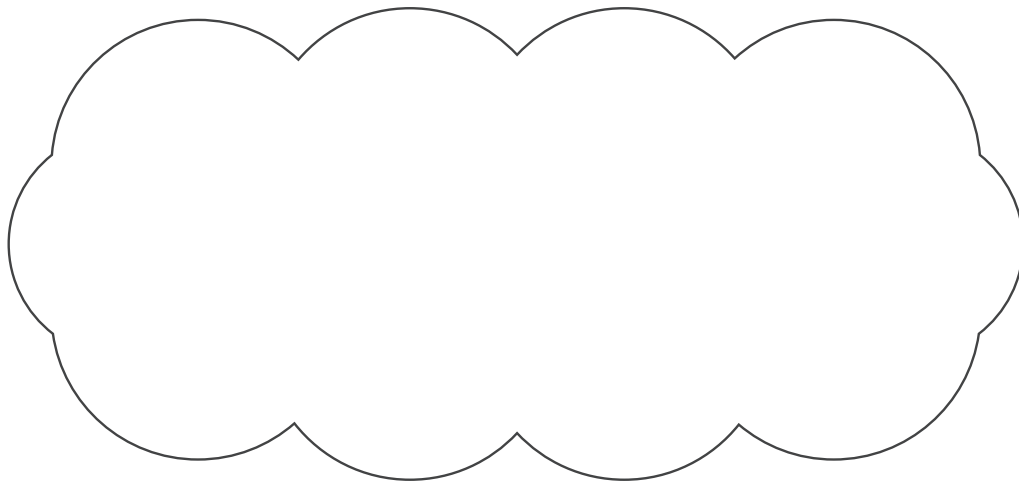
23. Holly has this star.



All the sides of her star are the same length.

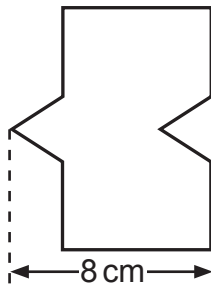
Holly says, '*my star is a regular shape.*'

Holly is **not** correct.
Explain how you know.



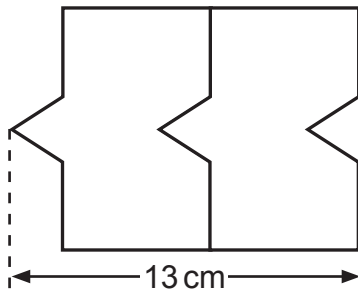
1 mark

24. Mia has some tiles.

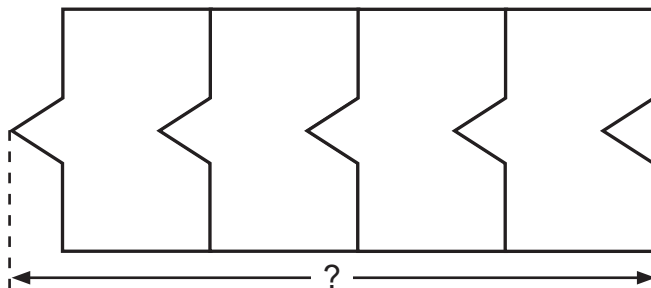


Not drawn accurately

Each tile is 8 cm long.



Two tiles fitted together are 13 cm long.



Calculate the length of **four** tiles fitted together.

Show your method

2 marks

