

Entrance Exam

Mathematics

45 Minutes



Scarborough College

NO CALCULATOR ALLOWED

NAME:

1. $14 + 23$

2. $135 + 277$

3. $26 - 7$

4. $345 - 189$

5. 134×20

6. 33×47

7. How many 8s are there in 72 ?

8. What is $19 \div 2$?

9. Write Twenty Thousand and Seventy Five in figures.

10. What is 2007 to the nearest 10?

11. What is 3200 divided by 40 ?

12. What is a third of 12?

13. What is $\frac{2}{5}$ of £40

14. What is $9.3 + 0.23$?

15. Put these in order, smallest first:

0.51, 0.058, $\frac{1}{2}$, 57%, 500

16. On day in winter, some temperatures in European cities were:

Paris -3°C

London 5°C

Berlin -7°C

(a) Which city was coldest that day?

(b) What was the difference in temperature between the hottest and coldest?

17. A bus leaves Hull at 8.25am and arrives in Beverley at 9.06am. It then takes another 38 minutes to get to Scarborough.

(a) How many minutes did the bus take to get from Hull to Beverley?

(b) At what time did the bus arrive in Scarborough?

(c) How long was the journey from Hull to Scarborough?

Give your answer in hours and minutes

18.



Here are 2 more ways to arrange the cards

3874

3847

(a) What is the **largest** number you can make with the 4 cards?

(b) What is the **smallest** number you can make with the 4 cards?

(c) How many possible different arrangements are there in total that start with the number 7?

19. Adam has a piece of wood 2 metres long. He saws it into pieces, each 10 cm long. How many pieces does he get?

20.. Alf has £1.31 and Bob has 89p. How much money must Alf give Bob so they both have the same amount?

21. The area of a rectangle is 54cm^2 . If two of it's side have length 6cm, what is the length of the other 2 sides?

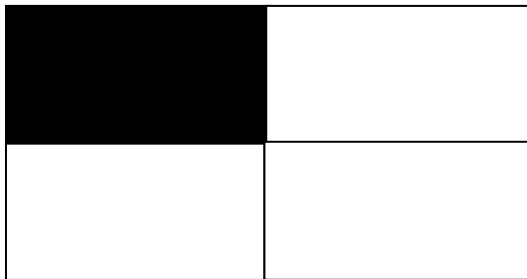
22. Fill in the next **two numbers** in the following number sequences.

(a) 3 8 13 18 23 ___ ___

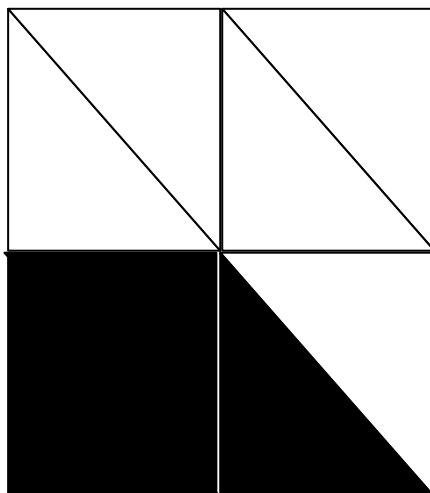
(b) 1 2 4 8 16 ___ ___

23. What fraction of these shapes has been shaded?

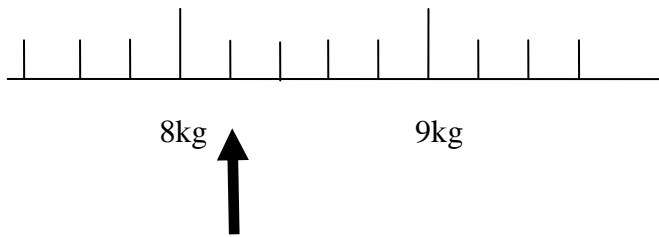
(a)



(b)

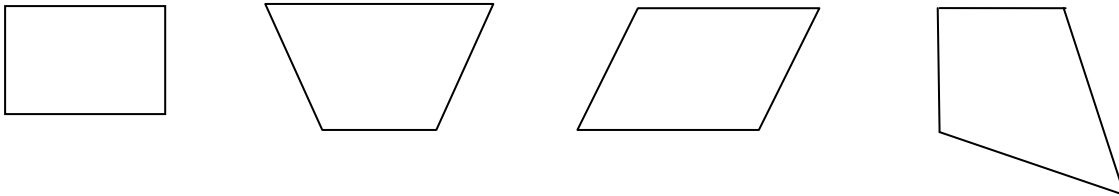


24.



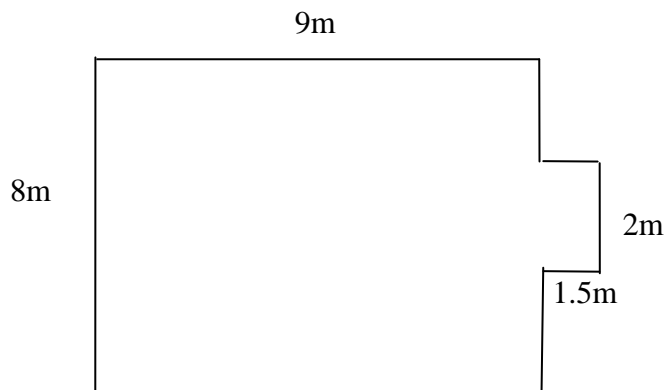
- (a) What weight does the arrow show?
- (b) Draw another arrow at the weight 9.4kg

25 (a) Put a tick against the shape which is different from the others.



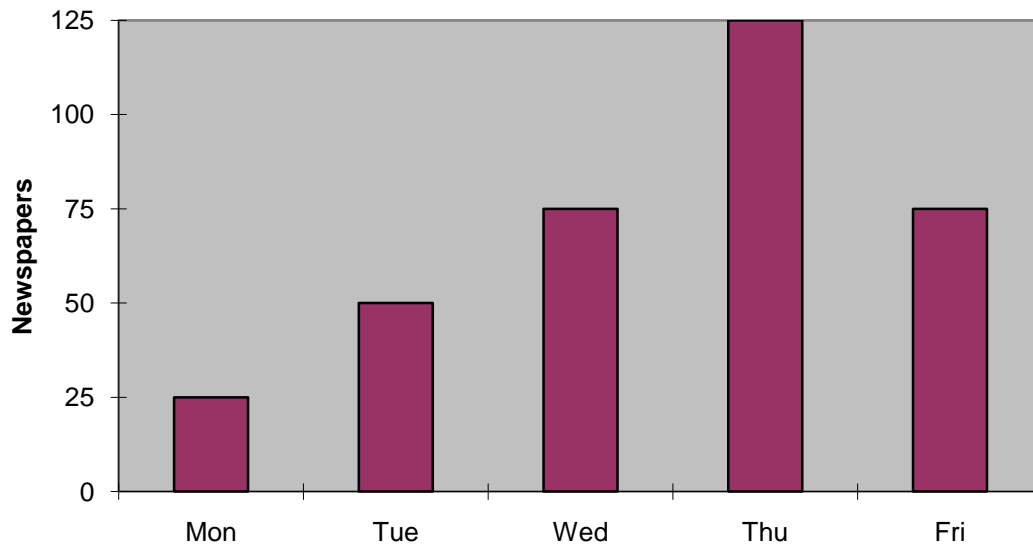
b) Why is this shape different?

26. Here is the plan of a room.



How far is the distance the whole way around the edge?

27. This graph shows the number of newspapers sold in a shop in 5 days:



(a) How many newspapers were sold on Wednesday?

(b) What is the difference between the highest and lowest number of papers sold?

28. A school has 65 pupils in total in years 5 and 6.

	Year 5	Year 6
Boys	14	17
Girls	13	?

a) How many girls are there in year 5?

b) How many boys are there in total in years 5 and 6?

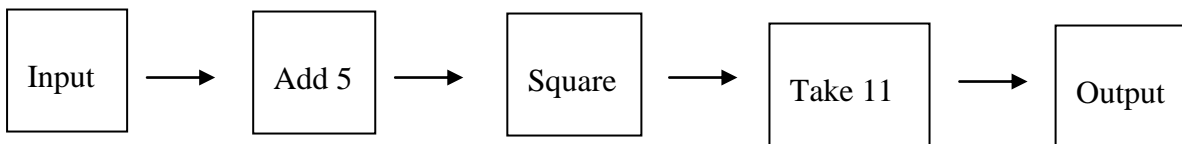
c) Calculate the missing number: the number of girls in year 6.

29. In a class of 25 pupils, 8 play the piano, 9 play the recorder and 12 play neither.

(a) How many play both the piano and the recorder?

(b) How many play only the recorder but not the piano.

30. Bob is using a number machine. It looks like this:



(a) If Bob's input number is 2, what is his output number?

(b) If Bob's output number is 70, what was his input number?

31. Alf buys 1 apple and 5 bananas. This costs £1.70.

Billy buys 2 apples and 3 bananas. This costs £1.30

(a) What do apples cost?

(b) What do bananas Cost?