



Hi! Welcome to our fun maths questions. Try to answer each question. Be careful and take your time as there is no time limit.

1. Write down in words these numbers:

a. 678 543

b. 2 040 040

c. 11 101 001

2. Write down in words and figures the value of the digits underlined:

Words

Figures

a. 3 570 112

b. 1 283 000

c. 6 666 060

3. Count on in steps of 10 000 from these numbers:

a. 88 466

b. 196 000

4. Write down 100 000 **less than** these numbers:

a. 827 451

b. 1 245 450

c. 1 006 700



5. The temperature was measured at 7.00 a.m. each day for a week.

Day	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Temp ($^{\circ}\text{C}$)	2	-2	-2	0	1	-3	-5

- a. What day had the coldest morning?
- b. What was the difference between the temperature on Monday and Saturday?

- c. Place the temperatures in order from lowest to highest:

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6. Round these numbers to the nearest 10 000:

- a. 126 789 b. 89 009 c. 98 642

7. Round these numbers to the nearest 100 000:

- a. 404 400 b. 1 257 777..... c. 980 000

8. a. Write the year 1961 in Roman numerals.
- b. Write the year 1067 in Roman numerals.
- c. What year is represented by the Roman numerals MM ?

9. a. Write down a number between 30 000 and 40 000 which is nearer 30 000 than 40 000.

b. A cricket team scores 9 965 runs in a season.
 Round this total to the nearest 100.



It's time to try some tricky addition and subtraction using formal written methods.

10. $32\,468 + 27\,908$

11. $87\,640 + 90\,909$

12. $65\,731 - 22\,569$

13. $80\,004 - 2659$

14. What is the total of £256.09 and £433.76?

15. Find the difference between £800.55 and £166.27.

16. Tom was updating his kitchen
He bought a fridge costing £199.95,
a microwave costing £65.30 and a
dishwasher costing £370.75.
How much did he spend altogether?
How much change from £1000 did he have?

Name:



17. Write down all the factors of these numbers:

a. 8 b. 13 c. 20

18. What are the common factors of 9 and 12?

19. Answer the questions below, using the written method in columns:

a. 852×40

b. 273×24

c. 3274×76

d. 4893×89

20. Put a circle round the square numbers shown below:

2 9 21 40 49 55 81

21. Put a circle round the prime numbers shown below:

4 7 9 11 25 31 39



Now a little division to keep
you on your toes!

22. Answer the questions below using the short method of division. Show all your working out as well as any remainders.

a. $3563 \div 6$

b. $9207 \div 8$

c. $4722 \div 7$

d. $6089 \div 9$

23. a. Five hundred and four stickers are shared between fourteen children. How many do they have each?

b. Explain how you found your answer.

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Now some questions using decimals and fractions: just your cup of tea!

24. Divide these numbers by 10:

a. $8.6 \dots\dots\dots$

b. $0.5 \dots\dots\dots$

c. $1.06 \dots\dots\dots$

25. Divide these numbers by 100:

a. $4.7 \dots\dots\dots$

b. $0.2 \dots\dots\dots$

c. $11.1 \dots\dots\dots$

26. Put the numbers in the box in order, starting with the smallest.

3.251 3.5 3.52 3.2

27. Complete the equivalent fractions below:

a. $\frac{1}{5} = \frac{\boxed{3}}{\boxed{}}$

b. $\frac{40}{100} = \frac{\boxed{}}{\boxed{10}}$

c. $\frac{6}{10} = \frac{\boxed{}}{\boxed{100}}$

28. Change these improper fractions into mixed numbers, simplifying where possible:

a. $\frac{13}{5} = \boxed{}$

b. $\frac{45}{10} = \boxed{}$

c. $\frac{22}{3} = \boxed{}$

29. Add these fractions, simplifying answers where possible:

a. $\frac{9}{5} + \frac{3}{5} = \frac{\square}{\square} = \square$ b. $\frac{7}{6} + \frac{2}{6} = \frac{\square}{\square} = \square$

c. $\frac{1}{4} + \frac{5}{8} = \frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{\square}$

d. $\frac{2}{3} + \frac{1}{6} = \frac{\square}{\square} + \frac{\square}{\square} = \frac{\square}{\square}$

30. Subtract these fractions, simplifying answers where possible:

a. $\frac{5}{6} - \frac{2}{6} = \frac{\square}{\square} = \square$ b. $\frac{6}{8} - \frac{4}{8} = \frac{\square}{\square} = \square$

c. $\frac{1}{3} - \frac{1}{6} = \frac{\square}{\square} - \frac{\square}{\square} = \frac{\square}{\square}$

31. Multiply these fractions, writing the answers as mixed numbers:

a. $4 \times \frac{2}{5} = \frac{\square}{\square} \times \frac{\square}{\square} = \frac{\square}{\square} = \square$

b. $7 \times \frac{2}{3} = \frac{\square}{\square} \times \frac{\square}{\square} = \frac{\square}{\square} = \square$



It's percentages time.
Yippee!

32. Fill in the gaps in this table. Try to do this without help and then see if you were right.

Percentage	Decimal	Fraction
25%		
	0.5	
75%		
	0.1	
20%		
	0.01	

33. Four hundred people saw a film.

0.75 of them said they enjoyed it.

- a. What fraction of them said they enjoyed it?
- b. What percentage of them said they enjoyed it?
- c. How many of them said they enjoyed it?



Now let's get on with some serious measurement.

34. Convert these measurements:

- a. 1.5 km = m
- b. 2.14 m = mm
- c. 62.5 m = cm
- d. 888 m = km

Name:



35. Find the perimeter of these shapes:

a. A regular hexagon if one side is 4 cm long wide

b. A regular pentagon if one side is 5 cm long wide

36. Find the area of these shapes:

a. A rectangle 6 cm long and 5 cm wide

b. A rectangle 9 cm long and 4 cm wide

37. A ship sets sail at 02.56 and arrives at its destination at 12.26. How long does the journey last?

38. Peter started his homework at 3.40 p.m. and finished at 5.15 p.m. How long did he take?

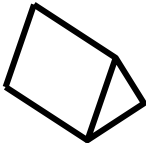
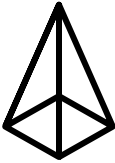

39. Fill in the gaps in this table:

Time in words	12 Hour time	24 Hour time
Five o'clock in the afternoon	5:00 p.m.	
Six minutes to midnight		
Five past two in the afternoon		

40. How many days are there in sixteen weeks?

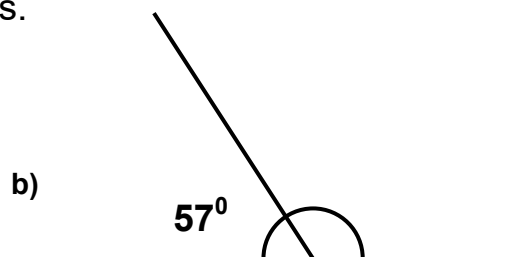
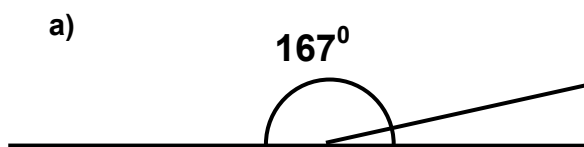
41. How many seconds are there in 15 minutes?

42. Complete the table below, putting in the correct number of triangular or rectangular faces:

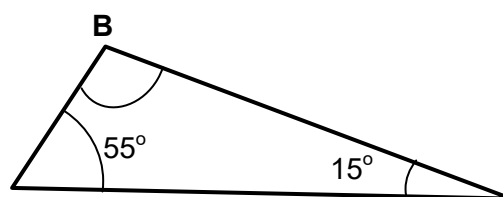
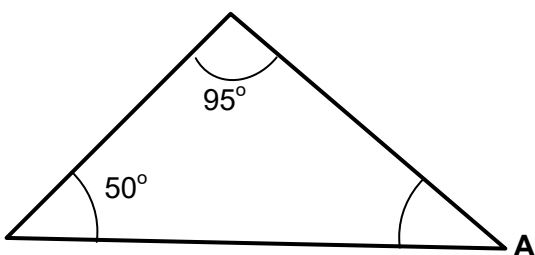
Shape Name	Shape Picture	Number of triangular faces	Number of rectangular faces (including squares)
Triangular prism			
Square based pyramid			
Tetrahedron			

43. **Calculate** the missing angles. These are **not** drawn to scale, so do **not** measure the angles.

Write the missing angles on the diagrams.



44. Calculate the missing angles in the diagrams.

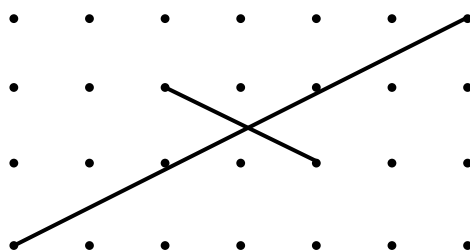
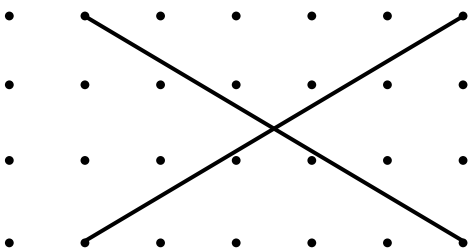
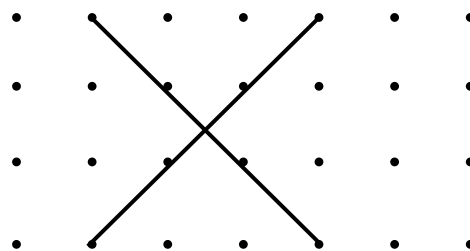
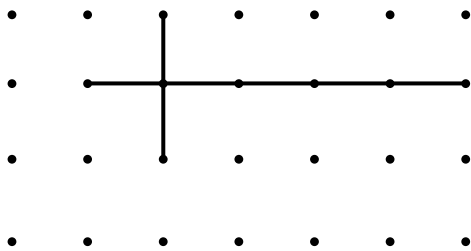


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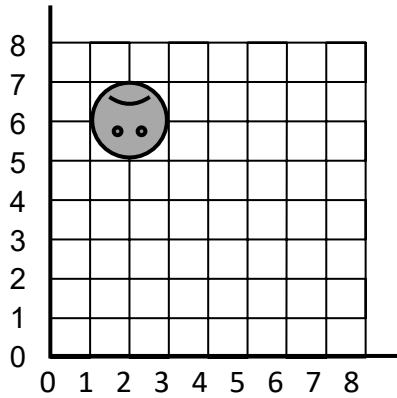
45. Draw an angle of 50° using a protractor.

46. These diagrams show the diagonals of some quadrilaterals.

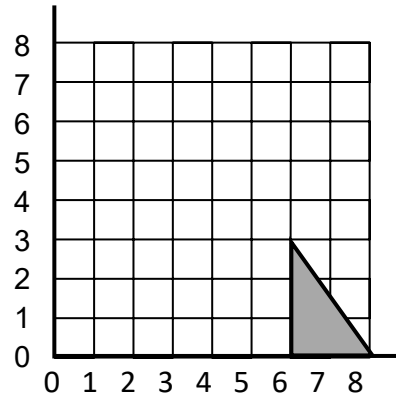
Draw the quadrilaterals and then name the shapes.



47. Draw the shapes after they have been translated:



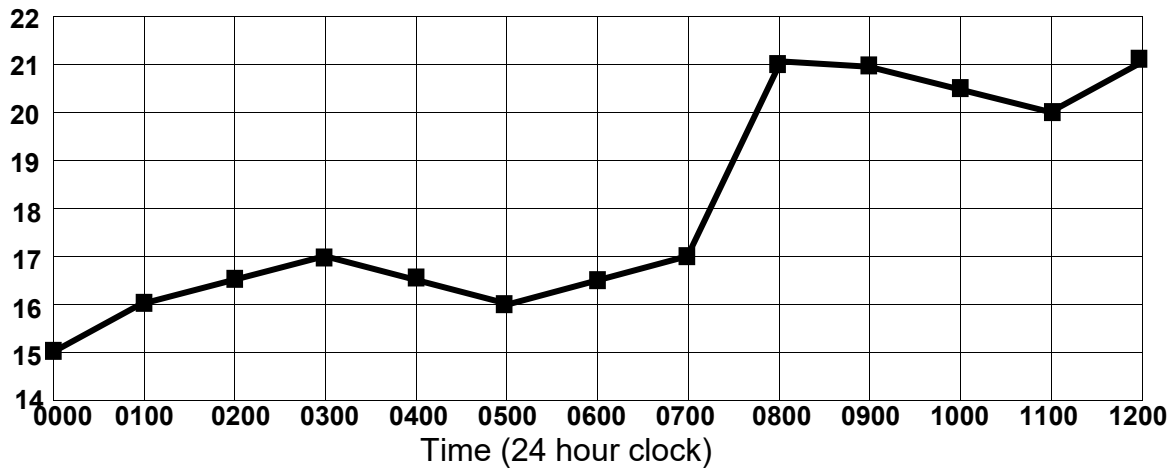
a. Translate **4** units to the **right** and **3** units **down**.



b. Translate **5** units to the **left** and **4** units **up**.

48. Here is a graph of the temperature in a bedroom over a twelve hour period.

Temp
°C



- What was the temperature at 0300 and at 0800?
- Estimate the temperature at 0730.
- At what time do you think the central heating was switched on?
- Explain why the points between the plotted points have real meaning.

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