

Written method

NO REGROUPING

$$1) \quad \begin{array}{r} \$15.24 \\ + \$23.45 \\ \hline \end{array}$$

$$2) \quad \begin{array}{r} \$71.05 \\ + \$15.33 \\ \hline \end{array}$$

$$3) \quad \begin{array}{r} \$52.27 \\ + \$21.22 \\ \hline \end{array}$$

$$4) \quad \begin{array}{r} \$83.15 \\ + \$ 4.33 \\ \hline \end{array}$$

$$5) \quad \begin{array}{r} \$64.27 \\ + \$13.51 \\ \hline \end{array}$$

$$6) \quad \begin{array}{r} \$22.44 \\ + \$51.30 \\ \hline \end{array}$$

$$7) \quad \begin{array}{r} \$41.73 \\ + \$44.25 \\ \hline \end{array}$$

$$8) \quad \begin{array}{r} \$83.36 \\ + \$12.51 \\ \hline \end{array}$$

$$9) \quad \begin{array}{r} \$36.64 \\ + \$23.22 \\ \hline \end{array}$$

WITH REGROUPING

$$10) \quad \begin{array}{r} \$74.68 \\ + \$18.17 \\ \hline \end{array}$$

$$11) \quad \begin{array}{r} \$58.42 \\ + \$29.46 \\ \hline \end{array}$$

$$12) \quad \begin{array}{r} \$75.19 \\ + \$37.35 \\ \hline \end{array}$$

$$13) \quad \begin{array}{r} \$29.56 \\ + \$15.25 \\ \hline \end{array}$$

$$14) \quad \begin{array}{r} \$79.61 \\ + \$44.23 \\ \hline \end{array}$$

$$15) \quad \begin{array}{r} \$57.39 \\ + \$15.37 \\ \hline \end{array}$$

$$16) \quad \begin{array}{r} \$15.78 \\ + \$22.09 \\ \hline \end{array}$$

$$17) \quad \begin{array}{r} \$56.49 \\ + \$38.63 \\ \hline \end{array}$$

$$18) \quad \begin{array}{r} \$82.08 \\ + \$65.75 \\ \hline \end{array}$$

Have a look at these number machines and use your decimal knowledge to fill in the missing numbers. Remember 10 tenths = 1 one (or 1 whole).

1) $\boxed{+ 0.3} \rightarrow$

- 0.2 → 0.5
0.6 → 0.9
1.1 →
2.4 →
3.7 →
6.8 →
7.6 →

2) $\boxed{+ 0.6} \rightarrow$

- 0.2 → 0.8
0.6 →
1.1 →
2.4 →
3.7 →
6.8 →
7.6 →

3) $\boxed{+ 0.9} \rightarrow$

- 0.2 → 1.1
0.6 →
1.1 →
2.4 →
3.7 →
6.8 →
7.6 →

4) $\boxed{+ 1.1} \rightarrow$

- 0.2 →
0.6 →
1.1 →
2.4 →
3.7 →
6.8 →
7.6 →

5) $\boxed{+ 2.5} \rightarrow$

- 0.2 →
0.6 →
1.1 →
2.4 →
3.7 →
6.8 →
7.6 →

6) $\boxed{+ 3.2} \rightarrow$

- 0.2 →
0.6 →
1.1 →
2.4 →
3.7 →
6.8 →
7.6 →

7) $\boxed{+ 2.8} \rightarrow$

- 0.2 →
0.6 →
1.1 →
2.4 →
3.7 →
6.8 →
7.6 →

8) $\boxed{+ 4.6} \rightarrow$

- 0.2 →
0.6 →
1.1 →
2.4 →
3.7 →
6.8 →
7.6 →

9) $\boxed{+ 7.1} \rightarrow$

- 0.2 →
0.6 →
1.1 →
2.4 →
3.7 →
6.8 →
7.6 →

multiply 2 digit number by 2 digit number

$$1) \quad \begin{array}{r} 5 \ 2 \\ \times 3 \ 5 \\ \hline \end{array}$$

$$2) \quad \begin{array}{r} 6 \ 1 \\ \times 2 \ 7 \\ \hline \end{array}$$

$$3) \quad \begin{array}{r} 2 \ 8 \\ \times 5 \ 6 \\ \hline \end{array}$$

$$4) \quad \begin{array}{r} 7 \ 2 \\ \times 1 \ 7 \\ \hline \end{array}$$

$$5) \quad \begin{array}{r} 5 \ 7 \\ \times 3 \ 5 \\ \hline \end{array}$$

$$6) \quad \begin{array}{r} 4 \ 8 \\ \times 2 \ 6 \\ \hline \end{array}$$

$$7) \quad \begin{array}{r} 9 \ 3 \\ \times 1 \ 4 \\ \hline \end{array}$$

$$8) \quad \begin{array}{r} 5 \ 3 \\ \times 4 \ 6 \\ \hline \end{array}$$

$$9) \quad \begin{array}{r} 8 \ 2 \\ \times 3 \ 5 \\ \hline \end{array}$$

$$10) \quad \begin{array}{r} 4 \ 9 \\ \times 1 \ 7 \\ \hline \end{array}$$

$$11) \quad \begin{array}{r} 6 \ 4 \\ \times 4 \ 7 \\ \hline \end{array}$$

$$12) \quad \begin{array}{r} 3 \ 9 \\ \times 6 \ 6 \\ \hline \end{array}$$

$$1) \quad \boxed{x 0.3} \rightarrow$$

$$6 \rightarrow 1.8$$

$$20 \rightarrow 6.0$$

$$5 \rightarrow$$

$$30 \rightarrow$$

$$7 \rightarrow$$

$$8 \rightarrow$$

$$40 \rightarrow$$

$$2) \quad \boxed{x 0.5} \rightarrow$$

$$60 \rightarrow 30$$

$$2 \rightarrow 1.0$$

$$50 \rightarrow$$

$$3 \rightarrow$$

$$7 \rightarrow$$

$$80 \rightarrow$$

$$40 \rightarrow$$

$$3) \quad \boxed{x 0.1} \rightarrow$$

$$6 \rightarrow 0.6$$

$$20 \rightarrow$$

$$5 \rightarrow$$

$$3 \rightarrow$$

$$70 \rightarrow$$

$$8 \rightarrow$$

$$40 \rightarrow$$

$$4) \quad \boxed{x 7} \rightarrow$$

$$0.4 \rightarrow$$

$$\rightarrow 2.1$$

$$\rightarrow 3.5$$

$$0.7 \rightarrow$$

$$\rightarrow 6.3$$

$$0.2 \rightarrow$$

$$0.8 \rightarrow$$

$$5) \quad \boxed{x 2} \rightarrow$$

$$\rightarrow 0.2$$

$$0.3 \rightarrow$$

$$\rightarrow 1.2$$

$$0.8 \rightarrow$$

$$\rightarrow 1.0$$

$$\rightarrow 1.8$$

$$\rightarrow 0.8$$

$$6) \quad \boxed{x 4} \rightarrow$$

$$0.7 \rightarrow$$

$$\rightarrow 2.4$$

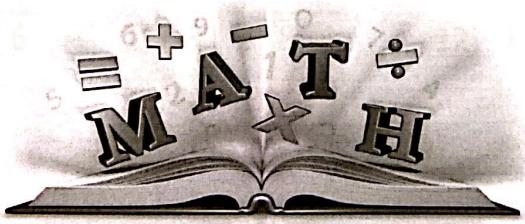
$$\rightarrow 0.8$$

$$0.4 \rightarrow$$

$$\rightarrow 3.2$$

$$0.5 \rightarrow$$

$$\rightarrow 0.3$$



division problems

1) 119 children get into teams of 4. How many teams of 4 can they make? How many children will not be in a team of 4?		
2) It takes the Earth 24 hours to spin once on its axis. How many complete spins can it make in 100 hours?		
3) A school bus can carry 50 children. How many buses are needed to transport 237 children?		
4) A piece of rope is 100m long. How many 7m long pieces can I cut from it?		
5) Captain has 150 gold coins which he shares out between his crew of 9. He takes the remainder of the coins himself. How many coins does each member get? How many coins does Captain get?		
6) How many complete weeks in 131 days?		

multiplication problem

1) The cruising speed of a Boeing 747 is about 570 miles per hour. How far would it travel at this speed in 4 hours?



2) A mile is about 1610 meters. How many meters in 3 miles?

3) Calculators come in boxes of 24. A school orders 13 boxes. How many calculators will the school get?



4) A sailfish can swim at a top speed of 68 miles per hour. How fast can 5 sailfish swim?

Trick problem



5) There are about 80 words on a page of Captain's Sea Stories book. If the book has 31 pages, about how many words are there in total?



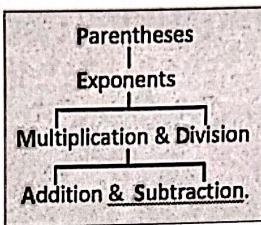
6) A pack of cards contains 52 cards. How many cards in 12 packs?

7) A recordable DVD can record up to 120 minutes. How many minutes can a box of 20 DVDs record for?



Order of operations

PEMDAS



Step 1) Do the parentheses (brackets).

Step 2) Do any exponents.

Step 3) Do any Multiplication OR Division left to right

Step 4) Do any Addition OR Subtraction left to right

Work out the answers to these complex calculations.

$1) 3 + (4 \times 5) = 3 + \underline{\quad} = \underline{\quad}$

$2) (5 + 4) \times 3 = \underline{\quad} \times 3 = \underline{\quad}$

$3) 7 \times (5 - 2) = 7 \times \underline{\quad} = \underline{\quad}$

$4) (9 - 6) \times 8 = \underline{\quad} \times 8 = \underline{\quad}$

$5) (20 \div 4) + 8 = \underline{\quad} + 8 = \underline{\quad}$

$6) 17 - (35 \div 5) = 17 - \underline{\quad} = \underline{\quad}$

$7) (7 \times 3) - (2 \times 4) = \underline{\quad} - \underline{\quad} = \underline{\quad}$

$8) 14 - (3 \times 5) = \underline{\quad} - \underline{\quad} = \underline{\quad}$

$9) (40 \div 5) + (3 \times 9) = \underline{\quad} + \underline{\quad} = \underline{\quad}$

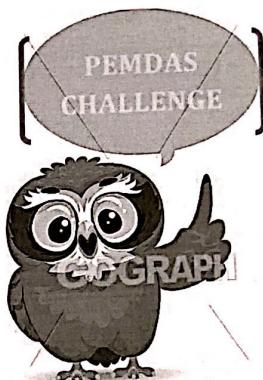
$10) (7 - 4) \times 12 = \underline{\quad} \times \underline{\quad} = \underline{\quad}$

Your challenge is to place the digits in the correct place to make an answer of 30 each time.

CHALLENGE A:

Use the digits 7, 9 and 3

$$\underline{\quad} \times \underline{\quad} + \underline{\quad}$$



CHALLENGE B:

Use the digits 2, 4 and 7

$$\underline{\quad} + \underline{\quad} \times \underline{\quad}$$

CHALLENGE C:

Use the digits 6, 9 and 4

$$\underline{\quad} \times \underline{\quad} - \underline{\quad}$$

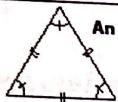
CHALLENGE D:

Use the digits 2, 7, 4, 1

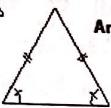
$$\underline{\quad} \times \underline{\quad} + \underline{\quad} \times \underline{\quad}$$



Identifying Triangles



An equilateral triangle has: 3 equal sides.
3 equal angles (60 degrees).

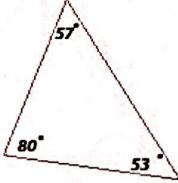
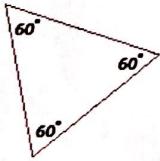
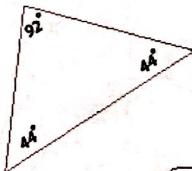
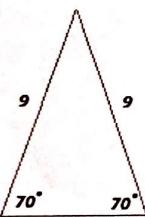
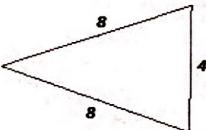
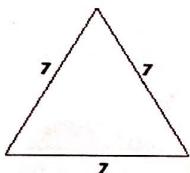


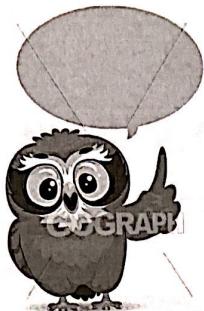
An isosceles triangle has: 2 equal sides and 1 different side.
2 equal angles and 1 different angle.



A scalene triangle has: 3 sides unequal in length.
3 unequal angles.

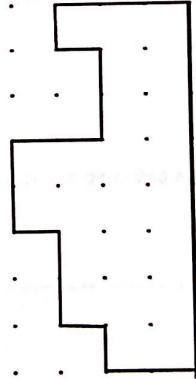
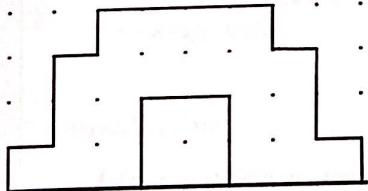
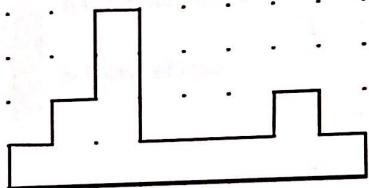
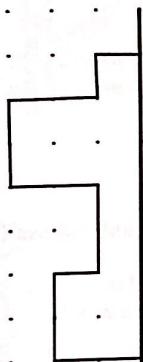
Look at the triangles below. Label each one as an equilateral, isosceles, or scalene triangle.





Now try this

Complete the missing half of each of the shapes using the mirror lines.





Identifying Lines

Name: _____

Use 'parallel', 'perp' (perpendicular) or 'inter' (intersecting) to describe the lines.

1)



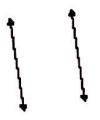
2)



3)



4)



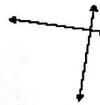
5)



6)



7)



8)



9)



10)



11)



12)



13)



14)



15)



Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

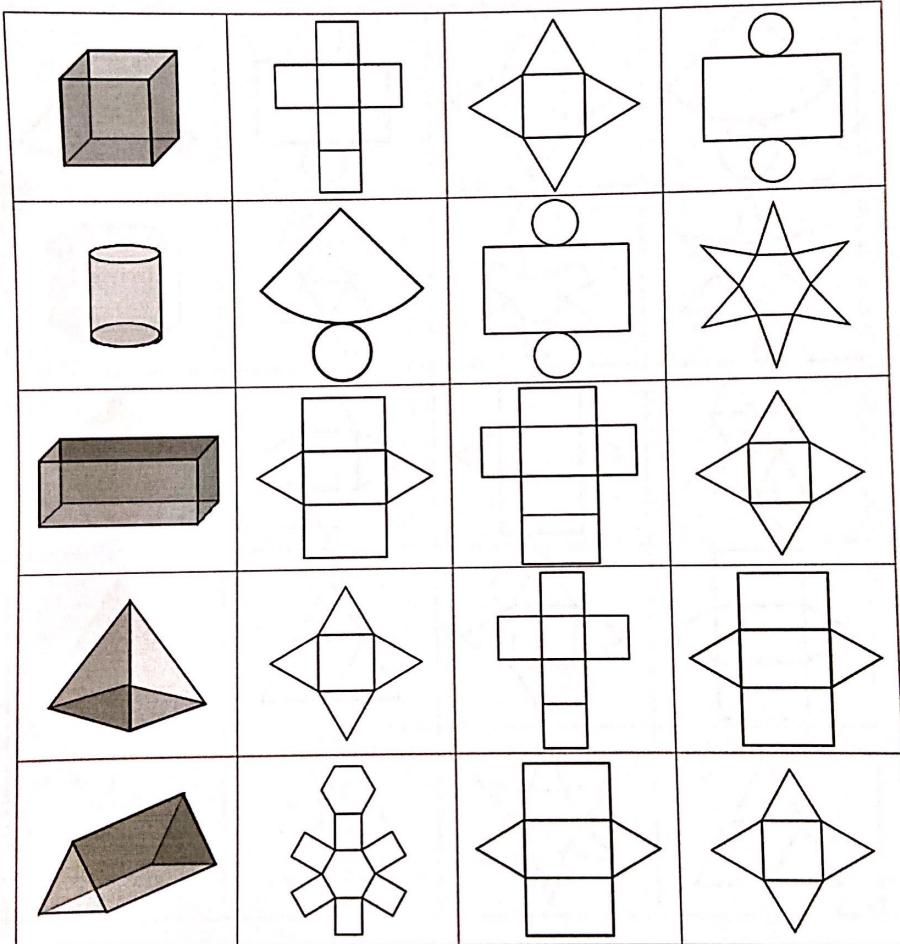
12. _____

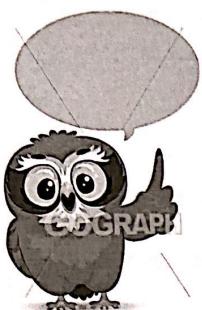
13. _____

14. _____

15. _____

For each 3d shape, shade the correct net.

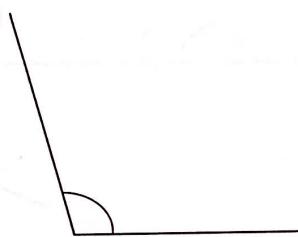




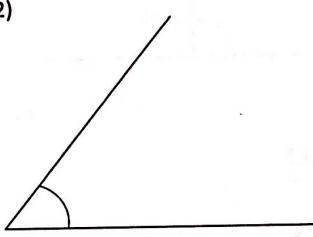
Remember to always measure the angles from 0

Use a protractor to measure the following angles.

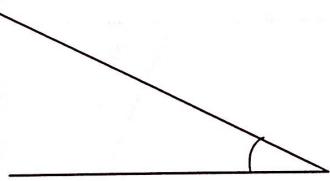
1)



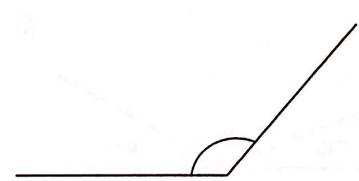
2)



3)



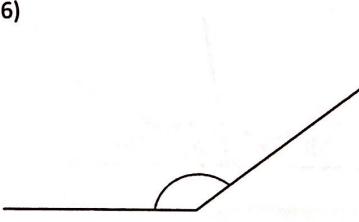
4)



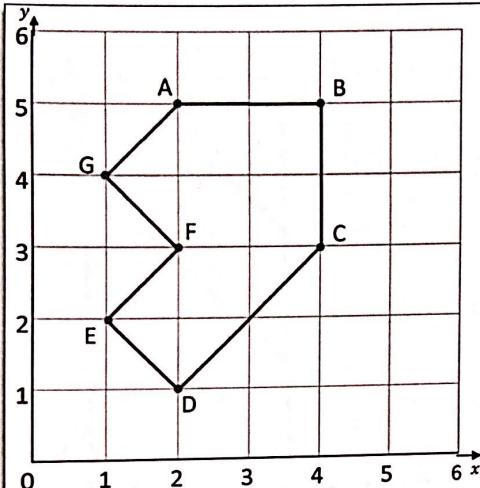
5)



6)



Co-ordinates



1) Write down the coordinates of the points on the first grid.

A (____)

B (____)

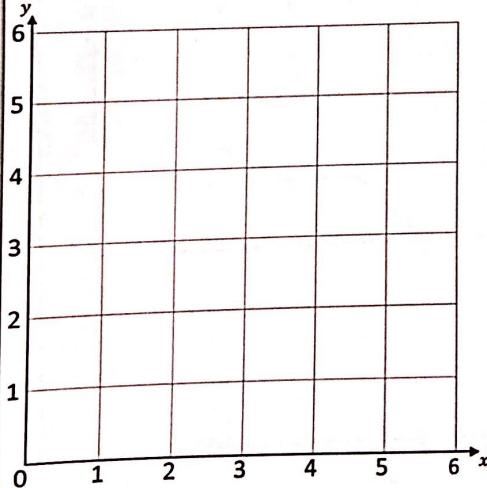
C (____)

D (____)

E (____)

F (____)

G (____)



2) Plot these coordinates on this grid: (1,2) (2,4) (4,3)

3) Plot the 4th point so that the four coordinates make a square.

What is the coordinate of the 4th point? (____)

4) Plot another square that has no horizontal or vertical lines. What are the 4 coordinates?

(____) (____)

(____) (____)

Now convert



Convert to the units shown:

1. $2.4 \text{ km} =$ _____ cm 2. $0.96 \text{ kg} =$ _____ g
3. $0.24 \text{ kg} =$ _____ g 4. $96 \text{ L} =$ _____ mL
5. $12 \text{ kg} =$ _____ g 6. $0.97 \text{ kg} =$ _____ g
7. $4.5 \text{ kg} =$ _____ g 8. $0.28 \text{ L} =$ _____ mL
9. $0.49 \text{ kg} =$ _____ g 10. $0.48 \text{ L} =$ _____ mL
11. $2.1 \text{ m} =$ _____ mm 12. $8.0 \text{ kg} =$ _____ g

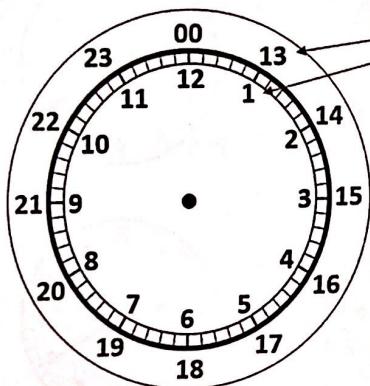
Convert to the units shown:

13. $200.0 \text{ mL} =$ _____ L 14. $90.00 \text{ cm} =$ _____ km
15. $2,000 \text{ m} =$ _____ km 16. $90.00 \text{ g} =$ _____ kg
17. $600.0 \text{ cm} =$ _____ m 18. $300.0 \text{ cm} =$ _____ km
19. $80.00 \text{ mm} =$ _____ cm 20. $30.00 \text{ g} =$ _____ kg
21. $40.00 \text{ mL} =$ _____ L 22. $4,000 \text{ mL} =$ _____ L
23. $70.00 \text{ mL} =$ _____ L 24. $6,000 \text{ m} =$ _____ km

The 24 hour clock does not have am and pm times.

To change an am time to a 24 hour time, you don't need to do anything unless it is 12am in which case the hour changes to 00. Add a zero before a single digit hour.

To change a pm time to a 24 hour time, just add 12 to the hour, unless it is 12pm. If the hour is 12pm then it does not change.



1:00pm becomes 13:00 in 24 hour time.

Examples

9:05am is 09:05 9:05pm is 21:05

7:27am is 07:27 7:27pm is 19:27

12:10am is 00:10 12:10pm is 12:10

Convert these times into 24 hour clock times.

12 hour	24 hour
4:25am	
9:20am	
2:55am	
11:35am	
1:07am	
12:42am	
6:13am	

12 hour	24 hour
4:25pm	
9:20pm	
2:55pm	
11:35pm	
1:07pm	
12:42pm	
6:13pm	

Your name: _____

Elapsed Time
Nearest Half Hour



Complete the table by filling in the elapsed times.

Start Time	End Time	Elapsed Time
8:00 A.M.	10:30 A.M.	2 hours and 30 minutes
10:00 P.M.	11:30 P.M.	
2:00 P.M.	5:00 P.M.	
12:30 P.M.	7:00 P.M.	
4:00 A.M.	11:00 A.M.	
3:00 P.M.	9:30 P.M.	
4:30 P.M.	6:00 P.M.	
12:00 A.M.	12:00 P.M.	
1:00 P.M.	1:30 P.M.	

Now try this



Work out the perimeter of the following shapes. Remember - the perimeter is the distance all the way round the outside of the shape.

- 1) A rectangle measuring 7cm by 4cm. Perimeter = _____ cm
- 2) A square with side 8cm. Perimeter = _____ cm
- 3) A rectangle with sides 15mm and 8mm. Perimeter = _____ mm
- 4) A square with sides of $2\frac{1}{2}$ cm Perimeter = _____ cm
- 5) A rectangle with sides 9cm and 7cm. Perimeter = _____ cm
- 6) A rectangle with sides $3\frac{1}{2}$ cm and $1\frac{1}{2}$ cm. Perimeter = _____ cm
- 7) A regular pentagon with sides 7cm Perimeter = _____ cm
- 8) A square with sides of 1.2m Perimeter = _____ m
- 9) An equilateral triangle with sides 21cm Perimeter = _____ cm
- 10) A regular hexagon with sides 11mm Perimeter = _____ mm

Work out the area and perimeter of the following rectangles.

- 1) A rectangle measuring
4m by 3m.

Area = _____ square m

Perimeter = _____ m

- 2) A rectangle measuring
5cm by 6cm.

Area = _____ square cm

Perimeter = _____ cm

- 3) A rectangle measuring
3ft by 6ft.

Area = _____ square ft

Perimeter = _____ ft

- 4) A rectangle measuring 9cm by
4cm.

Area = _____ square cm

Perimeter = _____ cm

- 5) A rectangle measuring
7m by 5m

Area = _____ square m

Perimeter = _____ m

- 6) A square with side 5cm.

Area = _____ square cm

Perimeter = _____ cm

- 7) A square with side 9mm

Area = _____ square mm

Perimeter = _____ mm

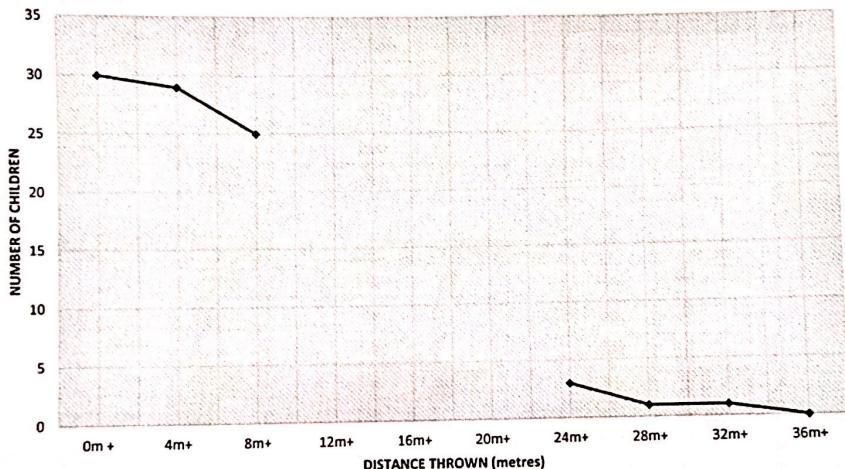
- 8) A rectangle measuring 1½m by
4m.

Area = _____ square m

Perimeter = _____ m

Here are the results of a throwing competition for 30 children. Each child had to throw a ball as far as they could. Flags were placed at 4m intervals to show how far they had thrown.

THROWING COMPETITION



Distance thrown	0m+	4m+	8m+	12m+	16m+	20m+	24m+	28m+	32m+	36m+
Number of children		29		18	10	6	3	1	1	0

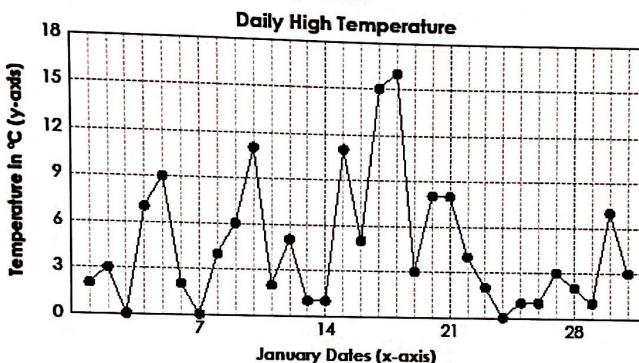
- 1) Plot the missing points on the line graph and join them up to complete the graph.
- 2) Complete the missing data on the table.
- 3) How many children managed to throw the ball more than 8 m? _____
- 4) How many children did not manage to throw the ball 16 m or more? _____
- 5) Answer true, false or can't tell to each of the statements below:

a)	More than half the children managed to throw at least 16 m.	
b)	Less than 5 children threw the ball more than 25 metres.	

Name: _____

Temperature Line Graph

The daily high temperatures for Gotham City in the month of January were recorded and graphed. Use the graph to answer the questions.



1. What was the high temperature in Gotham City on January 10? 1. _____
2. On which two days was Gotham City's high temperature 7°C? 2. _____
3. On which day did Gotham City have the highest temperature? 3. _____
4. On which three days did Gotham City have the lowest high temperature? 4. _____
5. Which of these days had the highest temperature?
 - a. January 2
 - b. January 15
 - c. January 17
 - d. January 30
6. Which of these statements about Gotham City's high January temperatures is true?
 - a. In January, Gotham City's high temperatures went above 12°C four times.
 - b. In January, Gotham City's high temperature was usually below freezing.
 - c. In January, Gotham City's high temperature did not go below freezing.
 - d. In January, Gotham City's climate is tropical.