

Westbourne House School Revision – Summer Term

Y6 MATHS REVISION CHECKLIST

The Exam(s) will consist of:

One Non-calculator Paper – duration 60 minutes

One calculator paper – duration 60 minutes

One short Mental Arithmetic Test – duration 10 minutes (paper is done during a maths lesson)

Equipment you will need for the exam:

- Ruler (15cm and 30cm)
- Pencil
- Eraser and pencil sharpener
- Protractor (for the calculator paper only)
- Calculator (for the calculator paper)

TOPIC / PAPER	WHAT TO REVISE	DONE?
<u>Non-Calculator Paper</u>	<p>Number</p> <ul style="list-style-type: none"> • 4 operations • Place value, rounding and estimating • Fraction, decimal and percentage equivalence • Fraction and decimal calculations • BIDMAS • Ratio <p>Algebra</p> <ul style="list-style-type: none"> • Solve equations • Continue pictorial sequences <p>Shape</p> <ul style="list-style-type: none"> • Area of rectangles, triangles and compound shapes • Using angle rules 	
<u>Calculator paper</u>	<p>Number</p> <ul style="list-style-type: none"> • Using a calculator for the 4 operations and inverse operations • Language of numbers and types of numbers (Prime, factors, multiples etc) • Converting between metric units • Place value • BIDMAS • Proportional reasoning (applied to speed) 	

<p><u>Mental Arithmetic Test</u></p> <p>NOTES/TIPS:</p>	<ul style="list-style-type: none"> • Find percentage amounts <p>Algebra</p> <ul style="list-style-type: none"> • Simplify expressions • Substitute into expressions <p>Shape</p> <ul style="list-style-type: none"> • Area of compound shapes • Perimeter of regular polygons • Measuring • Naming 2D shapes • Draw reflections of shapes <p>Data</p> <ul style="list-style-type: none"> • Read from graphs <ul style="list-style-type: none"> • Taken in classroom under exam conditions. • Pupils have 10 minutes to answer as many questions as possible • No calculators to be used. <ul style="list-style-type: none"> • Revise by practising the questions below, and appropriate websites like www.mathletics.co.uk or www.mymaths.co.uk • In all maths exams workings are essential. It must be assumed that any question worth more than 1 mark requires at least one line of working. Workings should not be “doodle” like but be clearly set out in a logical manor preferably starting at the top of the space provided and working in a downwards direction. • For any further information or guidance about revision or the actual exam, please contact the Head of Maths – Mrs Lucy Low (llo@westbournehouse.org) 	
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Number work

1. Calculations (non-calc!!)

- a. $354 + 45 =$
- b. $35 \times 9 =$
- c. $23 \times 6 =$
- d. double 72 =
- e. half 94 =
- f. $7.34 + 8.89 =$
- g. $9.21 - 5.32 =$
- h. $528 \div 3 =$

2. BIDMAS

- a. $3 - 5 + 8 =$
- b. $3 + 4 \times 5 =$
- c. $(2 + 3)^2 =$

3. Fill in the missing spaces on the following number sequences

- a. 3, 8, 13, 18, ,.....
- b. 3.5, 5.5, 7.5, 9.5, ,
- c. 6,, 26, ,, 56, 66

4. A sequence is formed following the rule “double and then add 5”

- a. If the first number is 4, find the next two numbers.
- b. If the second number is 25, what is the first number?

5. Fractions, decimals and %

- a. Write 0.6 as a fraction in its lowest terms
- b. Write $\frac{38}{100}$ as a decimal
- c. Write $\frac{38}{100}$ as a fraction in its lowest terms
- d. Write 38% as a decimal

e. Write 0.74 as a percentage

f. Find 10% , 25% and 50% of £7.00

g. Find 10%, 25% and 50% of £30

h. Find $\frac{2}{5}$ of 35

i. Find $\frac{5}{6}$ of 72

j. Calculate $\frac{1}{13} + \frac{2}{13}$

k. Calculate $\frac{2}{5} + \frac{3}{4}$

l. Mrs Jones has a pizza. Jack Jones eats $\frac{7}{12}$ and Mrs Jones keeps $\frac{1}{4}$ for herself. Her lucky dog gets the rest. What fraction of the pizza does her dog get?

6. Multiplying and dividing by 10, 100, 1000 (powers of 100)

a. $6.23 \times 10 =$

b. $6.23 \times 100 =$

c. $65.74 \div 10 =$

d. $45.3 \times 100 =$

e. $3.45 \div 1000 =$

7. Reverse calculations - fill in the missing number (you can use a calculator for b. and c.)

a. $3.4 \times \dots\dots\dots = 34$

b. $252 \div \dots\dots\dots = 84$

c. $\dots\dots\dots - 2.4 = 10.6$

8. Distance / time

a. If a car travels at 40 km per hour how far will it travel in 2 hours?

b. If a car travels at 30km per hour. How long will it take to travel 210 km?

9. The ratio of girls to boys in a class is 3:4. There are 12 boys. How many girls are there?

10. The ratio of cats to dogs on a street is 5:6 and there is a total of 44 animals on the street. How many dogs are there?

11. In a recipe for 3 people you need 6 eggs, 210 g flour and 90 g butter. How much of each of the ingredients would you need for

- a. 12 people
- b. 10 people

Algebra

12. Given that $a = 3$, $b = 4$, $c = -5$ find:

$$3a$$

$$4c$$

$$a + b + c$$

$$abc$$

$$a + b$$

$$a - c$$

13. Simplify the following expressions:

$$a + a + a + a$$

$$3a + 4a - 2a + 3b$$

$$3a - 4b + 2a + 5b$$

$$a \times a \times a \times a$$

$$3a \times 4b$$

14. Solve these equations

$$4a = 20$$

$$a + 5 = 7$$

$$2a + 7 = 17$$

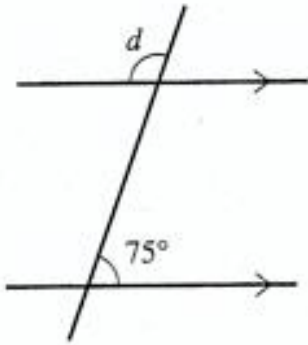
$$3a + 16 = 5a + 4$$

$$3a - 5 = a + 7$$

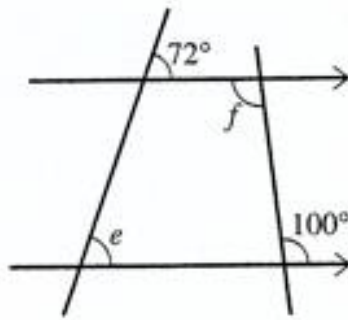
Angles

15. Find the missing angles

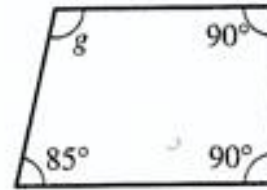
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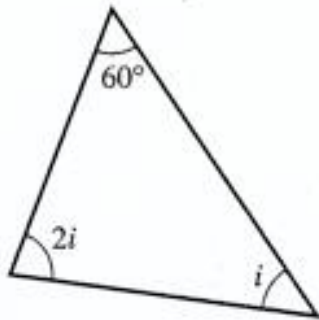
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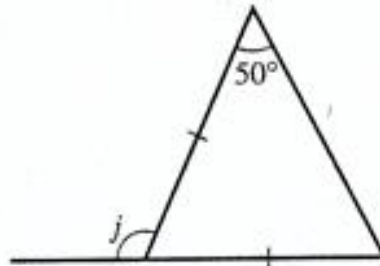
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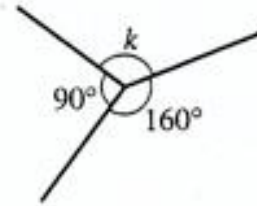
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9.



10.



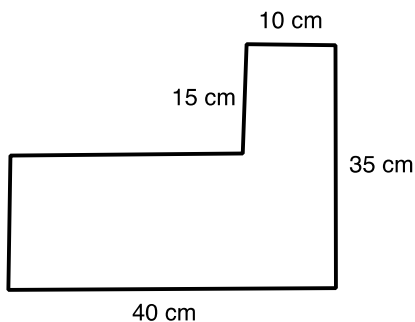
Area

16. The area of a square is 100 cm^2 . What is the perimeter?

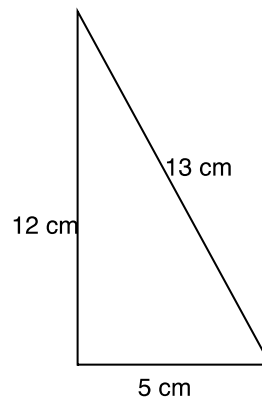
17. A triangle has a base of 10cm and a height of 8cm. What is the area?

18. A regular octagon has a side length of 5cm. What is the perimeter?

19. Find the perimeter of the following shape that has been made from two rectangles.



24. Find the area of the following triangle.



Data: Reading from Graphs



- 1) How many people bought Cocola during the week?
- 2) How many more people bought Fizz Juice than Magic Drink?
.....
- 3) Sam says, "More people bought Cocola than Fizzy Water and Sparkle Juice combined." Is he correct?
How do you know?
.....
- 4) How many drinks were sold altogether?.....