



Mathematics 1 – Grade 4

Welcome to your Conquesta Olympiad. When you have decided which of the answers is correct, scratch out the letter in the matching square on your answer sheet. Example:- If the answer to question 4 is c, then scratch out the letter c in the square containing c next to the number 4 (see example 1 below). If you've made a mistake and b should have been the answer, neatly cross out the mistake and then scratch out b (see example 2 below).

Example 1:-

4.	a	b	c	d
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Example 2:-

4.	a	b	c	d
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Useful tip:- When you have number sentences using different operations, apply the rule of **BODMAS**, which is the order of operations:- Firstly, calculate whatever is in **Brackets**, then **Other** (of, square roots, power of, etc.), then **Division and Multiplication** (from left to right as they rank equally), and lastly, **Addition and Subtraction** (also from left to right).

1. Calculate:

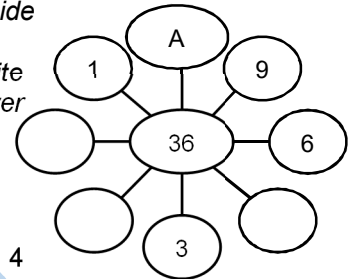
$$341 + 299 = \dots? \dots$$

- (a) 42 (b) 514 (c) 5 131 (d) 640

2. What is the answer if you subtract 675 from 3 050?

- (a) 3 625 (b) 3 725
(c) 2 375 (d) 2 425

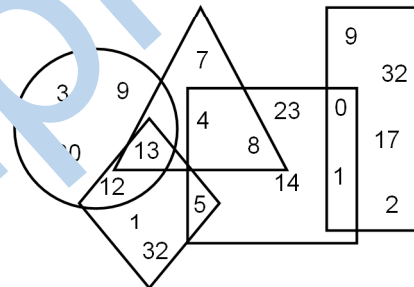
The numbers in the outside circles, when multiplied with the numbers opposite them, give you the answer in the middle.



3. What is the correct value at 'A'?

- (a) A = 21 (b) A = 4
(c) A = 2 (d) A = 3

4. Calculate the sum of the **odd** numbers in the rhombus.



- (a) 20 (b) 29 (c) 31 (d) 19

5. Which of the lists, (a) – (d), represents numbers arranged in **ascending** order?

- (a) 926; 269; 629; 962; 296
(b) 269; 296; 629; 926; 962
(c) 269; 296; 629; 962; 626
(d) 962; 926; 629; 296; 269

6. How many 125 ml cups will be used to fill the 1 l container?



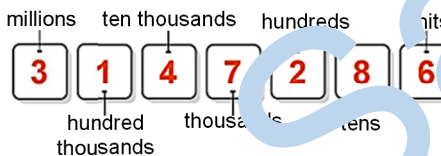
- (a) 4 (b) 5 (c) 10 (d) 8

Did you know?

- **Factors and multiples** are DIFFERENT things. But they both involve multiplication.
- **Factors** are the numbers we can multiply together to get another number. A factor is a number that divides exactly into another whole number, e.g., the factors of 12 are 1, 12, 2, 6, 3, 4 because they all divide exactly into 12.
- A **multiple** is the result of multiplying a number by an integer (not a fraction). $6 \times 2 = 12$, so 12 is a multiple of 6 and a multiple of 2.
- **Rounding** means making a number simpler, but keeping its value close to what it was. You can round down or round up. Rounding to the nearest 10:- The numbers 81, 82, 83 and 84 will all round down to 80. The numbers 85, 86, 87, 88 and 89 will all round up to 90.
- **Quadrilaterals** are 2D shapes with four sides, e.g., rhombus (diamond), parallelogram (a 4-sided flat shape with straight sides where opposite sides are parallel).
- **Polygons** are 2D shapes with 3 or more straight sides. E.g., triangles 3 sides, quadrilaterals 4 sides, pentagons 5 sides, hexagons 6 sides, heptagons 7 sides, octagons 8 sides, nonagons 9 sides, decagons 10 sides, etc.
- **Regular polygons** have equal angles & sides of equal length.
- **Irregular polygons** have sides of different lengths.
- 10 mm = 1 cm; 100 cm = 1 m; 1 000 m = 1 km.
- 60 seconds = 1 minute; 60 minutes = 1 hour.

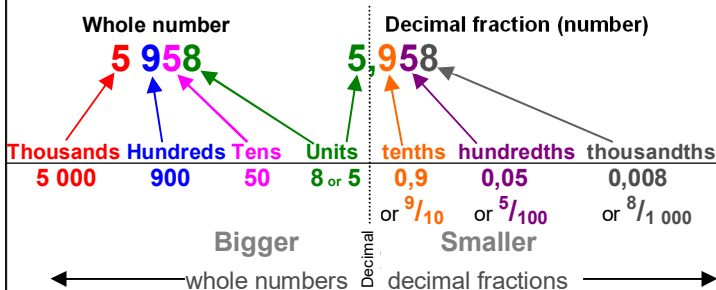
Number values

- By splitting each number into clusters of 3, you are able to read the number easily. For example, **65432** can be easily read when written this way: **65 432**.
- Remember that each **digit** in a **number** is important and has its own **value (worth)**. See example below.



In the above number, the digit 1 is bigger than the digit 8. This is because the **digit 1** is actually worth **100 C** and the **digit 8** is worth just **80**. You need to learn the place value of numbers so that you can put the digits in their correct places. Look at the chart below, which includes decimal fractions. When adding or subtracting with decimal numbers, **always** have the decimal points above one another.

Scale of Place Values

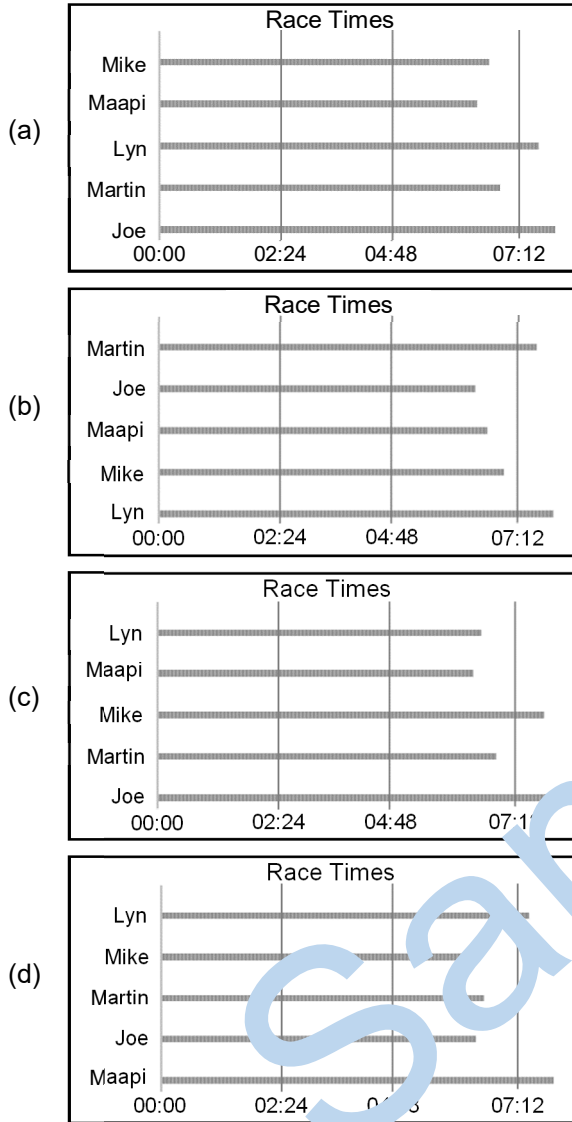


Use the picture below to help answer questions 7 – 11. (Remember, sec is short for seconds.)



Joe (8 min) Martin (6 min 53 sec) Mike (7 min 52 sec) Maapi (6 min 25 sec) Lyn (6 min 35 sec)

7. Which bar graph below correctly represents the athletes' times?



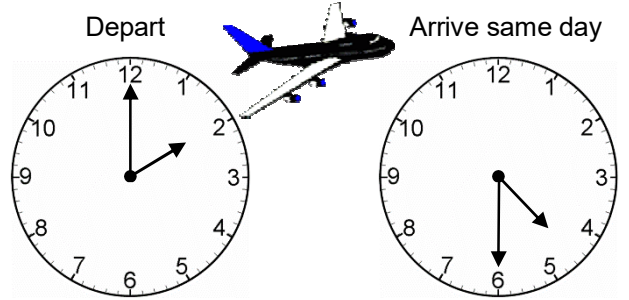
8. Which athlete had the fastest time?
 (a) Martin (b) Maapi (c) Mike (d) Lyn

9. What is the time difference between Maapi and Lyn?
 (a) 10 seconds (b) 5 seconds
 (c) 17 seconds (d) 60 seconds

10. What was the fastest time recorded?
 (a) 6 min 53 sec (b) 6 min 35 sec
 (c) 6 min 25 sec (d) 7 min 52 sec

11. What is the difference in time between the fastest and slowest runner?

- (a) 2 minutes and 35 seconds
- (b) 0 minutes and 35 seconds
- (c) 2 minutes and 25 seconds
- (d) 1 minute and 35 seconds



12. Which answer does not belong?
 (a) 2 hours and 30 minutes (b) 150 minutes
 (c) 2½ hours (d) 90 minutes

13. Count the \diamond in the diagram to form a number.

TH	H	T	U
	\diamond		
	\diamond		
	\diamond		
	\diamond		\diamond
	\diamond		\diamond
\diamond	\diamond		\diamond
\diamond	\diamond		\diamond
\diamond	\diamond		\diamond

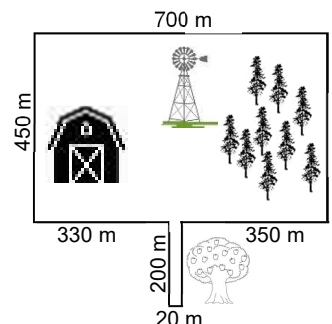
- (a) 3 805 (b) 385 (c) 380 (d) 3085

43C is a 3-digit number.

14. Which number must replace 'C' to make it divisible (\div) by 2?
 (a) 0 (b) 1 (c) 5 (d) 7

Perimeter is the outer edge of any shape.

15. Calculate the perimeter of the given shape.



- (a) 2 500 m
- (b) 2 700 m
- (c) 2 490 m
- (d) 2 050 m

(Not drawn to scale.)