



Name: _____

Date: _____

Score: _____ / 28

- 1** Write down the value of 6^2

(1 mark)

Answer _____

- 2** Write down the value of $\sqrt{81}$

(1 mark)

Answer _____

- 3** Here is a list of numbers.

21 34 37 45 51 58 59

- a. Write down the even numbers in the list.
- b. Write down the prime numbers in the list.

(2 marks)

Answer _____

- 4** Here is a list of numbers.

15 21 27 36 49 55 64 100 125

From the list, write down

- a. all the triangular numbers
- b. all the square numbers
- c. all the cube numbers.

Some numbers belong in more than one answer.

(3 marks)

Answer _____

- 5** Work out $3 + 4 \times 5$

(1 mark)

Answer _____

6

a. $13^2 = 169$. Write down the value of $\sqrt{169}$

b. Write down the value of $\sqrt[3]{125}$

c. $\sqrt{50}$ lies between two consecutive whole numbers. Write down the two whole numbers. (3 marks)

Answer _____

7

Use your calculator to work out

a. 2.3^3

b. $\sqrt{17.64}$

c. 3^7

(3 marks)

Answer _____

8

Work out $3^2 + 4 \times (7 - 2)$

(2 marks)

Answer _____

9

Here are the first five triangular numbers.

1 3 6 10 15

a. Describe how the sequence continues from one term to the next.

b. Work out the next two terms of the sequence.

(3 marks)

Answer _____

10 Square tables are pushed together in a row for a class party.
1 table seats 6 pupils, 2 tables seat 10 pupils and 3 tables seat 14 pupils.

a. How many pupils can sit at 5 tables?

b. A Year 7 class has 30 pupils. How many tables are needed so that every pupil has a seat?

(3 marks)

Answer _____

11 Sophie adds up odd numbers, starting from 1.

$$1 = 1$$

$$1 + 3 = 4$$

$$1 + 3 + 5 = 9$$

$$1 + 3 + 5 + 7 = 16$$

a. Write down the next line of the pattern.

b. What type of numbers are the answers?

c. Use the pattern to work out $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 + 19$ without adding the numbers one by one.

(3 marks)

Answer _____

12 Work out

a. $\sqrt{36 + 64}$

b. $\sqrt{36} + \sqrt{64}$

c. $40 - (3 + 2)^2 \div 5$

(3 marks)

Answer _____

End of questions | Total 28 marks