

1.

(a) Write down all the factors of 8.

Answer (2)

(b) Write down any 3 multiples of 8

Answer (2)

(c) The first four square numbers are 1, 4, 9, 16.
Write down the ninth square number.

Answer (1)

(Total 5 marks)

2. Write down the values of

(a) 7^2

Answer (1)

(b) $\sqrt{64}$

Answer (1)

(c) 4^3

Answer (1)

(d) $\sqrt[3]{27}$

Answer (1)

(Total 4 marks)

3. Here is a list of numbers.

3 7 12 16 19 30 44

(a) Which number in this list is a multiple of 5?

Answer (1)

(b) Which **three** numbers in this list are factors of 132?

Answer and and (3)

(Total 4 marks)

4. Write down all the common factors of 10 and 15.

Answer (Total 2 marks)

5.

- (a) Write 28 as the product of its prime factors.
Give your answer in index form.

Answer.....
(3)

- (b) Find the least common multiple (LCM) of 12 and 18.

Answer.....
(3)

- (c) Find the Highest Common Factor (HCF) of 36 and 54.

Answer
(3)
(Total 9 marks)

6.

- (a) Write 75 as the product of its prime factors.
Give your answer in index form.

Answer.....
(3)

(b) Tom, Sam and Matt are counting drum beats.

Tom hits a snare drum every 2 beats.
Sam hits a kettle drum every 5 beats.
Matt hits a bass drum every 8 beats.

Tom, Sam and Matt start by hitting their drums at the same time.
How many beats is it before Tom, Sam and Matt **next** hit their drums at the **same** time?

Answer beats (2)

(c) Find the highest common factor of 24 and 60.

Answer (2)
(Total 7 marks)

7.

A list of numbers is given below.

15 16 19 27 34 42 45

From this list, write down

(a) a cube number,

Answer (1)

(b) a prime number.

Answer (1)
(Total 2 marks)

8.

Work out the difference between the two square numbers in this list of numbers.

6 11 15 21 27 36 48 64

Answer (Total 3 marks)

9. Work out:

(a) 10^3 Answer..... (1)

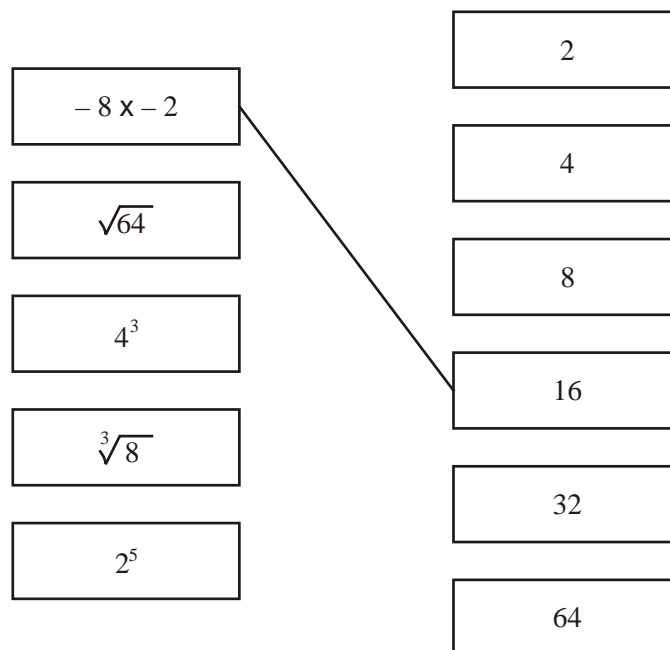
(b) $5^2 + 2^5$ Answer..... (1)

(c) $2^3 - \sqrt{4}$ Answer..... (1)

(d) $2^3 \times 5^2$ Answer..... (1)

(Total 4 marks)

10. Draw lines on the diagram to show which values are equal.
One line has been drawn for you.



(Total 3 Marks)

11. Which is larger, 4^3 or 3^4 ?
You **must** show your working.

Answer (Total 2 marks)

12. Work out the value of $5^3 - 4^3$.

Answer (Total 2 marks)