

1 List the factors for these numbers

- a) 12 b) 32 c) 48

2 a) Now from above find the factors that 32 and 48 have in common

b) which is the highest one ie the HCF of 32 & 48

3 Find the HCF of

remember to find the factors of the individual numbers first

- a) 20 & 45 b) 24 & 32 c) 36 & 72

4 List the first 6 multiples of

- a) 4 b) 6 c) 9 d) 15 e) 20

5 Now find the lowest multiple that 6 and 15 have in common

6 Find the LCM of

you will need to find the first multiples

- a) 6 & 4 b) 6 & 9 c) 12 & 20 d) 15 & 25

7 List the prime numbers between 10 & 40

try and work them out, don't just look them up!

8 Are there any Prime numbers that are even numbers?

9 What 2 prime numbers add up to make 30?

10 If I subtract one prime number from another I end up with 15, what 2 prime numbers did I start with?

11 Is 1 a prime number?

12 Write out the first 15 square numbers from 1^2 to 15^2

13 See if you can work these out without looking back to your square numbers

- a) $2^2 + 3^2$ b) $6^2 - 4^2$ c) $5^2 \times 2^2$ d) $11^2 + 12^2$ e) $15^2 \div 5^2$
f) $\sqrt{81}$ g) $\sqrt{144}$ h) $\sqrt{49} - \sqrt{36}$ i) $\sqrt{64} \div \sqrt{16}$ j) $\sqrt{169} - \sqrt{196}$

14 Now work out the following cube numbers

- a) 1^3 b) 2^3 c) 3^3 d) 4^3 e) 5^3

15 Work these out without a calculator

- a) 3^4 b) 10^5 c) 2^6

16 What is the smallest square number?

17 From your square & cube numbers can you find 2 numbers that are both square numbers and cube numbers

18 From the following numbers find

- a) a prime number b) a factor of 24 c) square number d) a multiple of 4

4, 6, 12, 15, 17, 20,

19 Write the following numbers as a product of their prime factors

- a) 30 b) 72 c) 120 d) 900

20 Two buses depart regularly from a bus station, Bus A leaves every 10 minutes and Bus B leaves every 12 minutes. For both buses the first bus of the day leaves at 9am, what is the next time that both buses will leave the bus station together?