The National Orthodox School Shmaisani

Mathematics worksheet (2)

Multiples and factors + square and cube numbers and roots

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Multiples and factors.

- Multiples: The multiples of a number are all the numbers from its timetable.
- Factors: The factors of a number are all the whole numbers that divide into it.
- Prime number: is the number that has only **two factors; 1** and the **number itself.**
- Composite number: a number that has **more than two factors.**

Exercise (1): Write the first seven multiples of:

a) 7: 7, 14, 21, 28, 35, 42, 49
b) 9: 9, 18, 27, 36, 45, 54, 63
c) 14: 14, 28, 42, 56, 70, 84, 98

Exercise (2): Write all the factors of:

a) 34: 1, 2, 17, 34
b) 90: 1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45, 90
c) 64: 1, 2, 4, 8, 16, 32, 64
d) 120: 1, 2, 3, 4, 5, 6, 10, 12, 20, 24, 30, 40, 60, 120

Exercise (3): Check (√) the prime number from the composite number.

	Prime number	Composite number
81		√
233	√	
411		√
6352		√

Exercise (4):

a) Find the HCF of:

32: 1, 2, 4, 8, 16, 32

48: 1, 2, 4, 6, 8, 12, 24, 48

HCF: 8

b) Find the LCM of:

5: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60

12: 12, 24, 36, 48, 60

20: 20, 40, 60

LCM: 60

Exercise (5): Check the divisibility for the numbers below.

	Divisible by 2	Divisible by 3	Divisible by 5	Divisible by 6	Divisible by 8	Divisible by 9
918120	√	√	√	√	√	
31245		√	√			
133137		√				√

Exercise (6): Work out.

a) 5^2 ⇨ 25

b) 11^2 ⇨ 121

c) 7^3 ⇨ 343

d) $\sqrt{196}$ ⇨ 14

e) $\sqrt[3]{125}$ ⇨ 5

f) $\sqrt[3]{64}$ ⇨ 4

g) 10^3 ⇨ 1000

h) $\sqrt{324}$ ⇨ 18

Challenging question.

Work out.

$$-7 - 10 \times \sqrt{16} \div \sqrt[3]{125} - (7 + 6^2 \div 12) - 20 - 4^3 =$$

$$= -7 - \underset{40}{10} \times \underset{8}{4} \div 5 - (7 + \underset{10}{36} \div 12) - 20 - 64 =$$

$$= -7 - \underset{-75}{8} - 10 - 20 - 64 = -15 - 10 - 20 - 64 = -25 - 84 =$$

$$= -109$$