Answer Key

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Maths Worksheet 2024-25

Name : - _____ Std. : - IV - ____

Roll No. :- _____ Worksheet No. Term-1:01 Date : - _____

Ch.-5: Factors & Multiples Ch-14 Patterns

Q-1 Choose the correct options.

1) The counting numbers are called natural numbers.
   a) prime ~~b)~~ natural c) Composite d) none of these
2) 1 is least factor of every natural number.
   a) 0 b) 2 ~~c)~~ d) 3
3) Factors of 12 are 1, 2, 3, 4, 6 and 12.
   a) 1,3,5 and 12 ~~b)~~ 1,2,3,4,6 and 12 c) 1,3,7 and 12 d) none of these
4) Patterns are shapes, designs and groups of numbers that repeat themselves in a predictable manner.
   a) multiplication ~~b)~~ patterns c) addition d) none of these
5) → → → → → → →
   This is a growing pattern
   a) shrinking b) multiplication c) division ~~d)~~ growing

Q-2 Fill in the blanks.

1) A growing pattern happens when something is added (multiplied) each time.
2) A multiple of a number is a product of the given number and some other counting number.
3) The numbers which are multiplied together are called the factors of the product.
4) A Shrinking pattern happens when something is taken away (subtracted/divided) each time.
5) The numbers which are divisible by 10 are also divisible by 5.

Q-3 Write T for true and F for false.

1) All numbers divisible by 2 and 3 both are divisible by 6. T
2) All odd numbers are divisible by 3. F
3) We can have growing patterns with pictures, objects, shapes and numbers too. T
4) There are infinite number of multiples of every number. T
5) The factors of 11 are 1, 3, 5 and 11. F

Q-4 Match the following.

1) 126	a) Factors of 8	1) - b
2) 1, 3, 9, 27, 81	b) Divisible by 9	2) - e
3) 250	c) Rule is divide by 2 each time	3) - d
4) 1, 2, 4 and 8	d) Divisible by 5	4) - a
5) 80, 40, 20, 10, 5	e) Rule is multiply by 3 each time	5) - c

Q-5 Do as directed.

1) Circle the prime numbers.

4	6	(11)	(7)	33	55
90	(19)	80	12	(31)	45

2) Find all the factors of the following.

a) 40

$1 \times 40 = 40$
$2 \times 20 = 40$
$4 \times 10 = 40$
$5 \times 8 = 40$

Factors of 40 are 1, 2, 4, 5, 8, 10, 20 and 40.

b) 88

$1 \times 88 = 88$
$2 \times 44 = 88$
$4 \times 22 = 88$
$8 \times 11 = 88$

Factors of 88 are 1, 2, 4, 8, 11, 22, 44 and 88.

c) 95

$1 \times 95 = 95$
$5 \times 19 = 95$

Factors of 95 are 1, 5, 19 and 95.

3) Draw the picture that comes next in this reducing pattern.

△△△△△ △△△△ △△△ △△ _____

4) Find the missing number in the following number patterns. Also write the rule for each pattern.

a) 5, 7, 21, 23, 69, 71, 213, 215 Rule Add 2 and Multiply by 3.

b) 50000, 10000, 2000, 400, 80, 16 Rule Divide by 5.

5) Find the product of the fifth multiple of 3 and eighth multiple of 5.

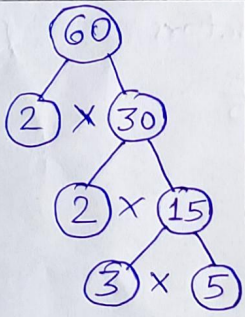
Fifth multiple of $3 = 3 \times 5 = 15$
Eighth multiple of $5 = 8 \times 5 = 40$
Product of 15 and 40 $= 600$

$$\begin{array}{r} 15 \\ \times\ 4 \\ \hline 60 \end{array}$$

Q-6 Solve the following.

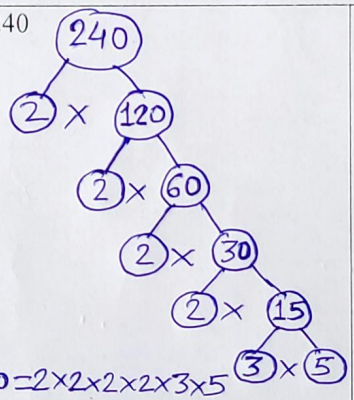
1) Write the prime factorization of the given numbers by making factor trees.

a) 60



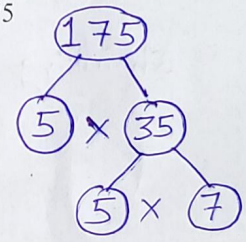
$60 = 2 \times 2 \times 3 \times 5$

b) 240



$240 = 2 \times 2 \times 2 \times 2 \times 3 \times 5$

c) 175



$175 = 5 \times 5 \times 7$

2) Write the prime factorization of the given numbers by division method.

a) 160

2	160
2	80
2	40
2	20
2	10
5	5
	1

$160 = 2 \times 2 \times 2 \times 2 \times 2 \times 5$

b) 84

2	84
2	42
3	21
7	7
	1

$84 = 2 \times 2 \times 3 \times 7$

c) 90

2	90
3	45
3	15
5	5
	1

$90 = 2 \times 3 \times 3 \times 5$