

Worksheet 2015-7EA-00001(1)

(1) Complete:

(a) The even prime numbers smaller than 10.

2 (Prime numbers smaller than 10: 2; 3; 5; 7)

(b) The factors of 18, which is multiples of 2.

$F_{18} = \{1; 2; 3; 6; 9; 18\} \Rightarrow \text{multiples of } 2 = \{2; 6; 18\}$

(c) The four whole numbers just smaller than 3 002.

2 998; 2 999; 3 000; 3 001

(d) The first four natural numbers.

1; 2; 3; 4

(2) Determine the value of: **[Remember the order of operations!]**

(a) 88×1

$= 88$

(b) $64 \div \underline{\underline{0}}$

$= \text{undefined}$

(c) $\underline{7 \times 0} + \underline{8 \div 1}$

$= 0 + 8$

$= 8$

(d) $101 - 0$

$= 101$

(3) Write the following:

(a) 27×100

$= 2\,700$

(b) $6\,700 \div 10$

$= 670$

$\frac{6\,700}{10}$

(c) $330 \div 110$

$= \frac{33}{11}$

$= 3$

$\frac{330}{110}$

(d) 80×600

$= (8 \times 6) \times 10 \times 100$

$= 48 \times 1\,000$

$= 48\,000$

(4) Complete:

$$(a) M_{12} = \{ \underline{12}; \underline{24}; 36; \underline{48}; 60; \dots \}$$

$$(b) M_8 = \{ 8; 16; \underline{24}; 32; 40; \underline{48}; \dots \}$$

$$(c) F_{12} = \{ \underline{1}; \underline{2}; 3; \underline{4}; 6; 12 \}$$

$$(d) F_8 = \{ \underline{1}; \underline{2}; \underline{4}; 8 \}$$

(5) Use your answer in (4) and determine the LCM of 12 and 8.

Common multiples: 24; 48; ---

Lowest CM = 24

$$\therefore LCM = 24$$

(6) Use your answer in (4) and determine the HCF of 12 and 8.

Common factors: 1; 2; 4

Highest CF = 4

$$\therefore HCF = 4$$

(7) Determine the prime factors of the following numbers:

$$(a) \begin{array}{r|l} 2 & 150 \\ 5 & 75 \\ 5 & 15 \\ 3 & 3 \\ & 1 \end{array}$$

$$(b) \begin{array}{r|l} 7 & 343 \\ 7 & 49 \\ 7 & 7 \\ & 1 \end{array}$$

$$\therefore 150 = 2 \times 3 \times 5 \times 5$$

$$\therefore 343 = 7 \times 7 \times 7$$