Maths Assignment.

CSS - 2021 -   Find the missing term.

a) 1, 8, 27, 64, 125, __216__

b) 4, 18, ____, 100, 180, 294

c) 8, 24, 12, 36, 18, 54, __27__

d) 132, 156, __182__, 210, 240

e) 15, 31, 63, 127, __255__

f) 121, 11, 81, 9, __49__, 7

g) 100, 50, 25, __12.5__, 6.25

h) 4, 9, 64, __, 1296, __2401__

i) 2, 5, 12, 24, 48, __

explain the logic behind these answers in the form of statements.

j) 44, 22, 66, 33, 132, __66__

Find the missing letters.

1) BCB, DED, FGF, HIH, __JKJ__

2) QPO, NML, KJI, __HGF__, EDC

3) SCD, TEF, UGH, __VIJ__, WKL

4) GAR, RAS, SAT, TAU, __UAV__

5) JAK, KBL, LCM, MDN, NEO

6) ELFA, GLHA, ILJA, KLLAMLNA 4

(d) How many prime numbers are between each of the following pairs.

a) $\sqrt{3}$ and $\sqrt{120}$

4 numbers $\Rightarrow$ 2, 3, 5, 7

b) $\sqrt[2]{10}$ and $\sqrt[2]{410}$

6 $\Rightarrow$ numbers $\Rightarrow$ 5, 7, 11, 13, 17, 19

c) $\sqrt[2]{10}$ and $\sqrt[2]{999}$

9 $\Rightarrow$ numbers $\Rightarrow$ 5, 7, 11, 13, 17, 19, 23, 29, 31

d) $\sqrt[2]{28}$ and $\sqrt{120}$

Sol: 1 $\Rightarrow$ number $\Rightarrow$ 7

e) $\sqrt[3]{8}$ and $\sqrt{400}$

7 $\Rightarrow$ numbers $\Rightarrow$ 3, 5, 7, 11, 13, 17, 19   4