

Question of the Day-9

Aug 7, 2018

Solutions

Class 6th

Mathematics:

Sol : Total weight of alloy = 28 kg.

Ratio of zinc and copper = 3 : 4.

Sum of ratio terms = (3+4) = 7.

∴ Quantity of copper in the given alloy = $\left(28 \times \frac{4}{7}\right)$ kg = 16kg

Hence, the given alloy contains 16 kg of copper.

Physics:

Ans : (A) 15 hour – 45 minutes

Chemistry:

Ans : (B) Au, Ag

Biology:

Ans : (D)

Class 7th

Mathematics:

Ans : (B)

Sol : $3^x = K$ $5^y = K$ $75^z = K$

$3 = K^{\frac{1}{x}}$ $5 = K^{\frac{1}{y}}$ $75 = K^{\frac{1}{z}}$

$75 = K^{\frac{1}{z}}$

$5^2 \times 3^1 = K^{\frac{1}{z}}$ Simplify

Physics: Ans : (1)

Chemistry:

Ans: (D) $R(OH)_3$ and R_2S_3

Biology:

Ans : (C)

Class 8th

Mathematics: Ans : (A)

Sol : $\frac{4}{3}(3) + 3\left(\frac{3}{4}\right) - 2\left(\frac{4}{3}\right) - \frac{3}{4}\left(\frac{1}{3}\right)$

$= 4 + \frac{9}{4} - \frac{8}{3} - \frac{1}{4}$

$= \frac{48 + 27 - 32 - 3}{12}$

$\frac{40}{12} = \frac{10}{3}$

Physics:

Ans : A-w,B-p,C-q,D-r,E-u,F-v,G-t,H-s

Chemistry:

Ans : (A)

Biology:

Ans : (C)

Class 9th

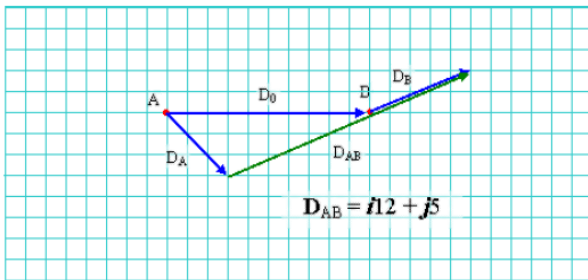
Mathematics:

Ans : (C)

Sol : We know $\cos 90^\circ = 0$

\therefore The value of $\cos 1^\circ \cos 2^\circ \cos 3^\circ \dots \cos 100^\circ = 0$

Physics:



Numerically the solution is:

$$\begin{aligned}
 D_{AB} &= D_0 + D_B - D_A \\
 &= i10 + [i5 + j2] - [i3 - j3] \\
 &= i12 + j5
 \end{aligned}$$

Chemistry:

Ans : (D)

Biology:

Ans : (B)

Class 10th

Mathematics:

Ans : (A)

Sol : Given $A + B = \frac{\pi}{4}$

$$\tan(A + B) = 1$$

$$\tan A + \tan B = 1 - \tan A \tan B$$

$$\tan A + \tan B + \tan A \tan B = 1$$

Physics:

Ans : (C)

Chemistry:

Sol : Photosynthesis is considered an endothermic reaction because energy in the form of sunlight is absorbed by the green plants.

Biology:

Ans : (C)

Reasoning :

Ans : (A) 294493