


Class- 8

MAT

- 1.(C) $2 + 3 + 6 + 10 = 21$
 $5 + 4 + 7 + 11 = 27$
 $3 + 9 + 8 + 12 = 32$

- 2.(D) $1^2 + 1 = 1$
 $2^2 + 2 = 6$
 $3^2 + 3 = 12$
 $4^2 + 4 = 20$
 $5^2 + 5 = 30$

- 3.(C) Angel

CHOCOLATE  CHOCOLATE

- 4.(D)

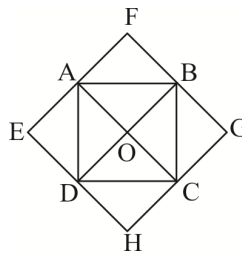
- 5.(B) **Triangles :**

AFB, BCG, CHD, DEA

AOB, BOC, COD, DOA

ABC, BCD, CDA, DAB

So total = 12



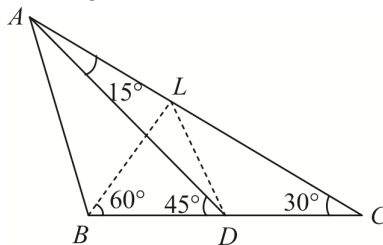
MATH

- 1.(A) Let the age of amit be x years.
 His brother's age = $x + 2$
 His sister's age = $x + 6$
 His mother's age = $x + 20$

According to question, $\frac{4x + 28}{4} = 39$

$\Rightarrow x = 32$

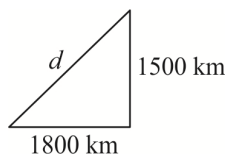
- 2.(B) Draw BL perpendicular to AC and goin L to D



Since, $\angle BCL = 30^\circ$, we get $\angle CBL = 60^\circ$. Since, BLC is a right triangle with $\angle BCL = 30^\circ$. We have $BL = \frac{BC}{2} = BD$. Thus, in triangle BLD , We observe that $BL = BD$ and $\angle DBL = 60^\circ$. This implies that BLD is an equilateral triangle and hence $\angle B = \angle D$. Using $\angle LDB = 60^\circ$ and $\angle ADB = 45^\circ$, we get $\angle ADL = 15^\circ$. Thus, $\angle D = \angle A = \angle B$. This implies that L is the circumcentre of the triangle BDA . Thus,

$$\angle BAD = \frac{1}{2} \angle BLD = \frac{1}{2} \times 60 = 30^\circ$$

3.(C) $a = \sqrt{(1500)^2 + (1800)^2} \approx 2343 \text{ km}$



Physics

- 1.(D) Changthangi Goat and Bakharwal Sheep are found in State of Jammu and Kashmir.
2.(A) GSLV - Geosynchronous Satellite Launch Vehicle and
GSAT - Geosynchronous Satellite

Chemistry

- 1.(D) It is advisable to add acid to water with constant stirring for dilution.
Addition of water to acid is highly exothermic reaction and dangerous too.
 \therefore 'A' contains water and 'B' contains acid.
Acid will turn blue litmus red however water will not change colour of litmus paper.
- 2.(D) $\text{H}_2\text{O} (\text{s}) \longrightarrow \text{H}_2\text{O} (\text{l})$
Change of state is physical change.
However dissociation of H_2O into H_2 and O_2 is chemical change.
Also, liquid water is denser than ice (solid).