NEW STANDARD ACADEMY

Semri Kothi Super Market, Raebareli
CLASS 9 DPP (Academy) 26-08-2025

PHYSICS

1. In what direction does the buoyant force on an object immersed in a liquid act?
2. The volume of 50 g of a substance is 20cm ^{3} If the density of water is 1gcm - ^{3} will the substance float or sink?
3. The volume of a 500 g sealed packet is 350cm ^{3} Will the packet float or sink in water if density of water is 1g cm $^{-3}$? What will be the mass of displaced by the packet?
4. Why is it difficult to hold a school bag having a strap made of a thin and strong string?
5. You have a bag of cotton and an iron bar, each indicating a mass of 100 kg when measured on a weighing machine. In reality, one is heavier than other. Can you say which one is heavier and why?

CHEMISTRY

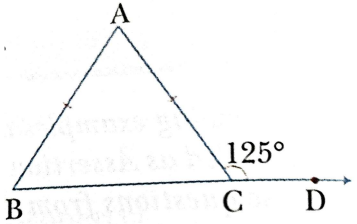
1. What are alloys? Give examples.
2. How can we separate the constituent of a colloidal solution?
3. Define (a) Solute (b) Solvent (c) Solution.
4. What is Tyndall effect? Explain with examples.
5. Define (a) Foam (b) Aerosol (c) Emulsion

BIOLOGY

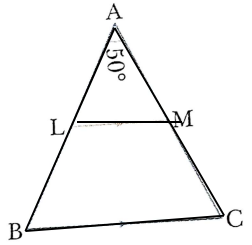
1. Give the four difference cartilage and bone
2. Why blood is fluid connective tissue.
3. What is lymph, Givr it's function
4. What is the function of thrombocytes
5. What is the difference between blood and lymph

MATHS

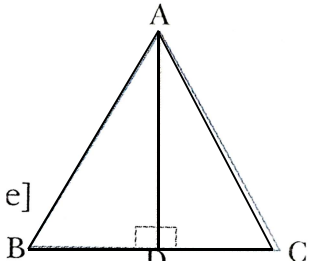
1. In the given figure AB = AC and $\angle ACD = 125°$.Find $\angle A$.



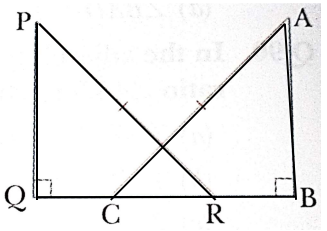
2. In the adjoining figure, ABC is an isosceles triangle with AB = AC and LM is parallel to BC. If ∠A = 50°, find ∠LMC.



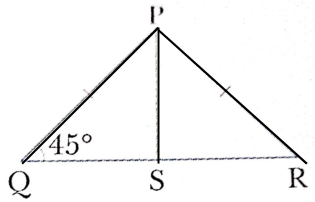
3. AD is an altitude of an isosceles triangle ABC in which AB = AC. Show that:
   (i) AD bisects BC. (ii) AD bisects ∠A



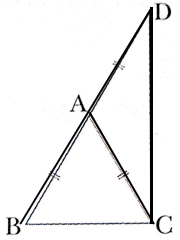
4. In the given figure, PQ 1 QB and AB | QB, PR = AC and QC = BR. Prove that ZQPR = ∠BAC.



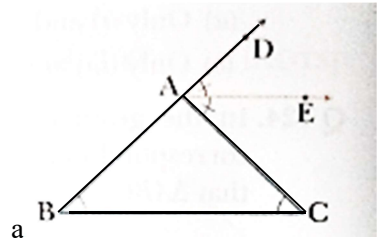
5. In the given figure, PS is the median, bisecting angle P, then QPS is:



6. In the adjoining figure, ABC is an isosceles triangle in which AB = AC. If side BA is extended to D such that AD = AB, then show that ∠BCD is a right angle.



7. In the given figure, MBC is an isosceles triangle in which AB = AC and AE bisects angle CAD Prove that AE ||BC



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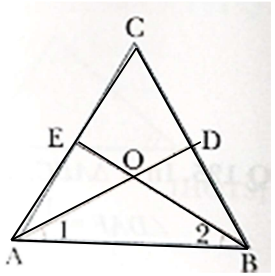
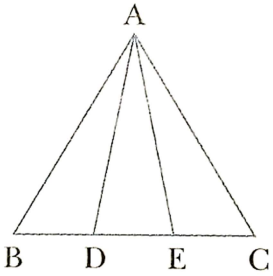
8. In the given figure angle ABC = angle BAC D and E are points on BC and AC respectively such that DB = AE IF AD and BE intersect at O then prove that OA = OB



9. In the given figure, if AB = AC and angle BAD = angle CAE, then prove that Delta*ADE is an isosceles triangle.



10. In the adjoining figure, ABC and DBC are two isosceles triangles on the same base BC. Show that ∠ ABD = ∠ ACD.