1. Name the triangle whose all three sides are of equal measure
2. Name three solid shapes available I class room
3. What fraction of a clockwise revolution does the hour hand of a clock turn through, when it goes from

   (a) 3 to 9 (b) 4 to 7 (c) 7 to 10 (d) 12 to 9

   (e) 1 to 10 (f) 6 to 3
4. Name the types of following triangles:

   (a) Triangle with lengths of sides $7cm, 8cm$ and $9cm$.

   (b) $\Delta ABC$ with $AB = 8.7cm, AC = 7cm$ and $BC = 6cm$.

   (c) $\Delta PQR$ such that $PQ = QR = PR = 5cm$.

   (d) $\Delta DEF$ with $m\angle D = 90^\circ$

   (e) $\Delta XYZ$ with $m\angle Y = 90^\circ$ and $XY = YZ$.

   (f) $\Delta LMN$ with $m\angle L = 30^\circ, m\angle M = 70^\circ$ and $m\angle N = 80^\circ$.
5. How many sides, angles does a triangle have?
6. What is the measure of (i) a right angle? (ii) a straight angle?
7. Name an angle whose measure is greater than that of a right angle and less than straight angle.
8. Name a triangle whose all three angles are acute.
9. Name a triangle having a right angle with two sides of equal length
10. What fraction of a clockwise revolution does the hour hand of a clock turn through, when it goes from

    (a) 3 to 9 (b) 4 to 7 (c) 7 to 10 (d) 12 to 9

    (e) 1 to 7 (f) 6 to 3
11. There are two set-squares in your box. What are the measures of the angles that are formed at their corners? Do they have any angle measure that is common?
12. Name the types of following triangles:

    (a) $\Delta ABC$ with $AB = 8.7cm, AC = 7cm$ and $BC = 7cm$.

    (b) $\Delta PQR$ such that $PQ = QR = PR = 5cm$.

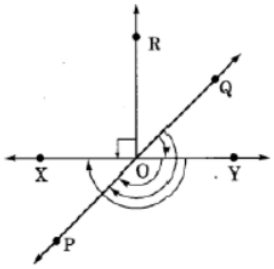
    (c) $\Delta XYZ$ with $m\angle Y = 90^\circ$ and $XY = YZ$.
13. How many right angles do you make if you start facing

    (a) north and turn anti-clockwise to east?

    (b) West and turn to west?

**Case Study 1**

14. In the given figure, name the following angles as acute, obtuse, right, straight or reflex.

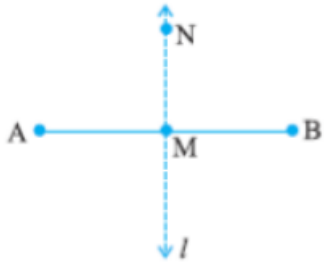


(a) ∠QOY (b) ∠YOP (c) ∠ROX (d) ∠QOX

(e) ∠POQ

**Case Study 2**

15. Perpendicular lines When two lines intersect and the angle between them is a right angle, then the lines are said to be perpendicular. If a line A B is perpendicular to C D, we write $AB \perp CD$.




**Perpendiculars around us!**

You can give plenty of examples from things around you for perpendicular lines (or line segments). The English alphabet T is one. Is there any other alphabet which illustrates perpendicular? Answer the following questions

(a) In $AB \perp CD$ what is the angle between AB and CD?

(b) Write two English alphabets which represent perpendicular lines.

(c) Is letter V model of perpendicular lines?