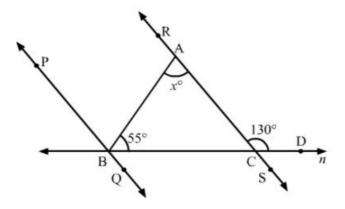


Lines and angles Ex 14.2 Q26

Answer:



$$\begin{split} & \angle RCD + \angle RCB = 180^{\circ} \text{ (Linear pair)} \\ & \Rightarrow \angle RCB = 180^{\circ} - 130^{\circ} = 50^{\circ} \\ & \text{In } \triangle ABC, \\ & \angle BAC + \angle ABC + \angle BCA = 180^{\circ} \\ & \Rightarrow \angle BAC = 180^{\circ} - 55^{\circ} - 50^{\circ} = 75^{\circ} \end{split} \tag{Angle sum property)}$$

Lines and angles Ex 14.2 Q27

Answer:

Lines and angles Ex 14.2 Q28

Answer:

(i) Since AC || BD and CD || AB, ABCD is a parallelogram.

∠CAB + ∠ACD = 180° (Sum of adjacent angles of a parallelogram)

∴ ∠ACD = 180° - 65° = 115°

∠CAD = ∠CDB = 65° (Opposite angles of a parallelogram)

∠ACD = ∠DBA = 115° (Opposite angles of a parallelogram)

(ii) Here,

AC || BD and CD || AB

∠DAC = x = 40° (Alternate interior angle)

∠DAB = y = 35° (Alternate interior angle)

******* END *******