Lines and angles Ex 14.1 Q10

Answer :

(i) Linear pairs:

$\angle ABD$ and $\angle DBC$

$\angle ABE$ and $\angle EBC$

Because every linear pair forms supplementary angles, these angles are:

$\angle ABD$ and $\angle DBC$

$\angle ABE$ and $\angle EBC$

Lines and angles Ex 14.1 Q11

Answer :

Let x and y be two supplementary angles that are equal.

$\angle x = \angle y$

According to the question,

$\angle x + \angle y = 180^\circ$

$\Rightarrow \angle x + \angle x = 180^\circ$

$\Rightarrow 2\angle x = 180^\circ$

$\Rightarrow \angle x = \frac{180^\circ}{2} = 90^\circ$

$\therefore \angle x = \angle y = 90^\circ$

Lines and angles Ex 14.1 Q12

Answer :

Let x be the complement of the given angle 28°.

$\therefore \angle x + 28^\circ = 90^\circ$

$\Rightarrow \angle x = 90^\circ - 28^\circ = 62^\circ$

So, supplement of the angle = $180^\circ - 62^\circ = 118^\circ$

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