

①: $\angle 3$ & $\angle 6 \rightarrow$ Alternate interior angle

ii $\angle 2$ & $\angle 4 \rightarrow$ Adjacent angle

iii $\angle 3$ and $\angle 7 \rightarrow$ corresponding

iv $\angle 2$ and $\angle 7 \rightarrow$ Alternate exterior angle

v $\angle 4$ & $\angle 6 \rightarrow$ co-interior angle

vi $\angle 1$ & $\angle 8 \rightarrow$ Alternate angle

vii $\angle 1$ & $\angle 5 \rightarrow$ corresponding angle

viii: $\angle 1$ and $\angle 4 \rightarrow$ ~~vert~~ corresponding angle

ix $\angle 5$ and $\angle 7 \rightarrow$ adjacent angle.

②: $\angle 1$ and $\angle 4$ - vertically opposite.

ii $\angle 4$ & $\angle 8$ - Alternate interior angle

iii $\angle 10$ & $\angle 12$ - vertically opposite angle

iv $\angle 7$ & $\angle 13$ - corresponding angle.

v $\angle 6$ & $\angle 8$ - vertically opposite angle.

vi: $\angle 11$ & $\angle 8$ - co-interior angle

vii $\angle 7$ & $\angle 9$ - vertically opposite angle

viii $\angle 4$ & $\angle 5$ - adjacent angle

ix $\angle 4$ & $\angle 6$ - co-interior angle

x) $\angle b$ & $\angle f$ Adjacent angles

xi) $\angle 2$ & $\angle 3$ - co-interior angle

3) i) $\angle a = \angle c$ (Alternate interior angles will be equal, if two parallel lines cut by a transversal)

$\angle a = \angle b$ (Corresponding angles)

$\angle b = \angle c$ (vertically opposite angle)

ii) $\angle x = \angle y$ (vertically opposite angle)

$\angle x = \angle l$ (Corresponding angles)

$\angle m = \angle k$ (vertically opposite angle)

$\angle d = \angle n$ (vertically opposite angle)

$\angle n = \angle r$ (Corresponding angle)

$\angle k = \angle q$ (Corresponding angle)

$\angle l = \angle y$ (Alternate interior angle)

$\angle m = \angle g$ (Alternate exterior angle)

~~$\angle d$~~ $\angle d = \angle r$ (Alternate exterior angle)