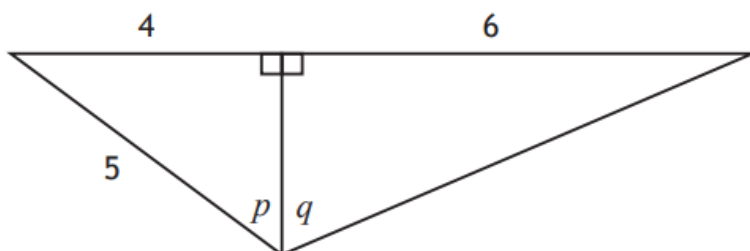




The diagram shows two right-angled triangles with angles  $p$  and  $q$  as marked.



(a) Determine the value of:

(i)  $\cos p$

1

(ii)  $\cos q$ .

1

(b) Hence determine the value of  $\cos(p + q)$ .

3

Answers:

(a) (i)  $\frac{3}{5}$

(ii)  $\frac{3}{\sqrt{45}}$  or  $\frac{1}{\sqrt{5}}$

(b)  $-\frac{3}{\sqrt{45}}$  or  $-\frac{1}{\sqrt{5}}$