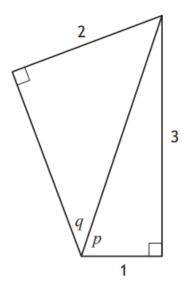
## Higher Maths SQA 2021 Paper 1 Question 5



Two right-angled triangles are shown below.



(a) Determine the value of

(i)  $\sin p$ 

1

(ii)  $\cos q$ .

2

(b) Find the exact value of  $\cos(p+q)$ .

3

Answers:

(a) (i) 
$$\frac{3}{\sqrt{10}}$$

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

(b) 
$$\frac{\sqrt{6}-6}{10}$$