Sine, Cosine and Tangent (c)

1. Using the relevant trigonometric relation, solve for the unknown angles in the following right angle triangles.

(i)

(ii)

(iii)

(iv)

(v)

(vi)
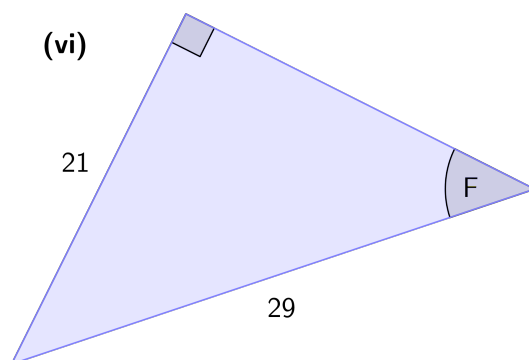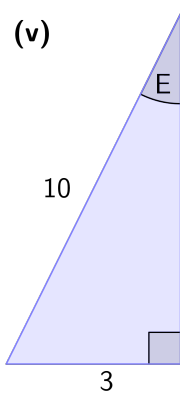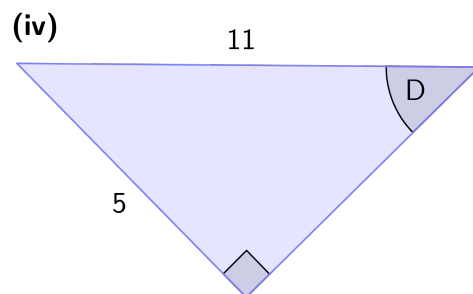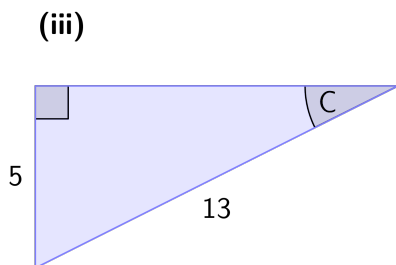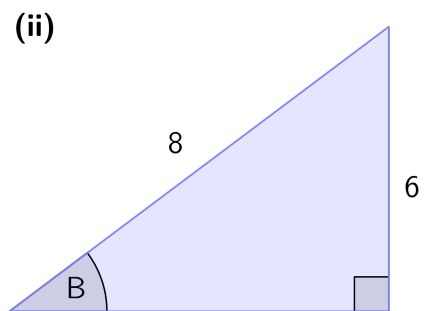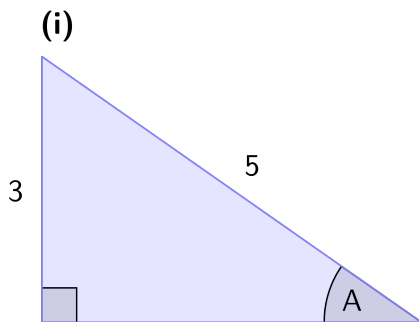
2. Calculate the unknown angles in the following triangles.
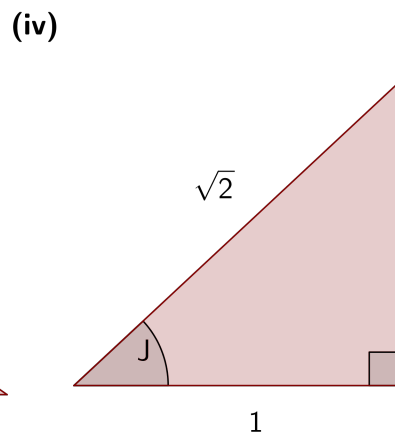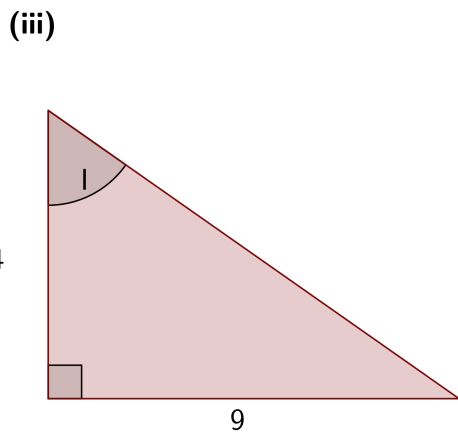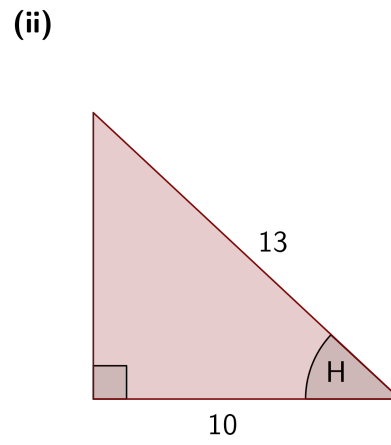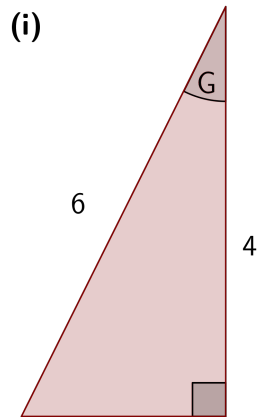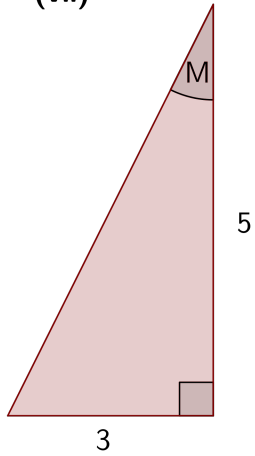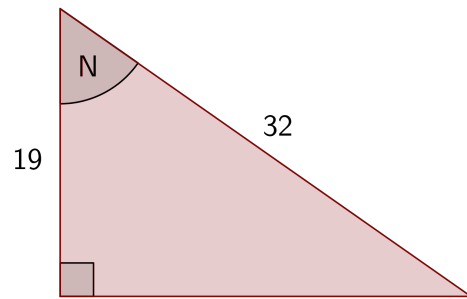
(i)

G

6

4

(ii)

13

H

10

(iii)

I

4

9

(iv)

$\sqrt{2}$

J

1

(v)

23

K

100

(vi)

5

10

L
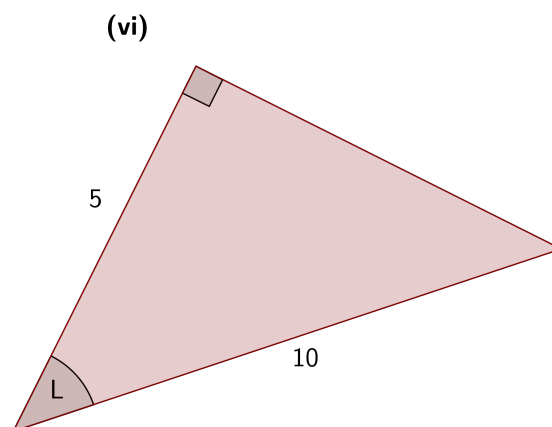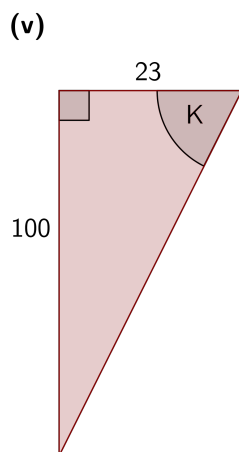
(vii)

(viii)

3. A pilot is landing an aircraft in Shannon airport. If the plane is 500m above the ground and exactly 750m from the edge of the runway, what angle must the plane start descending at (i.e. what is α)?