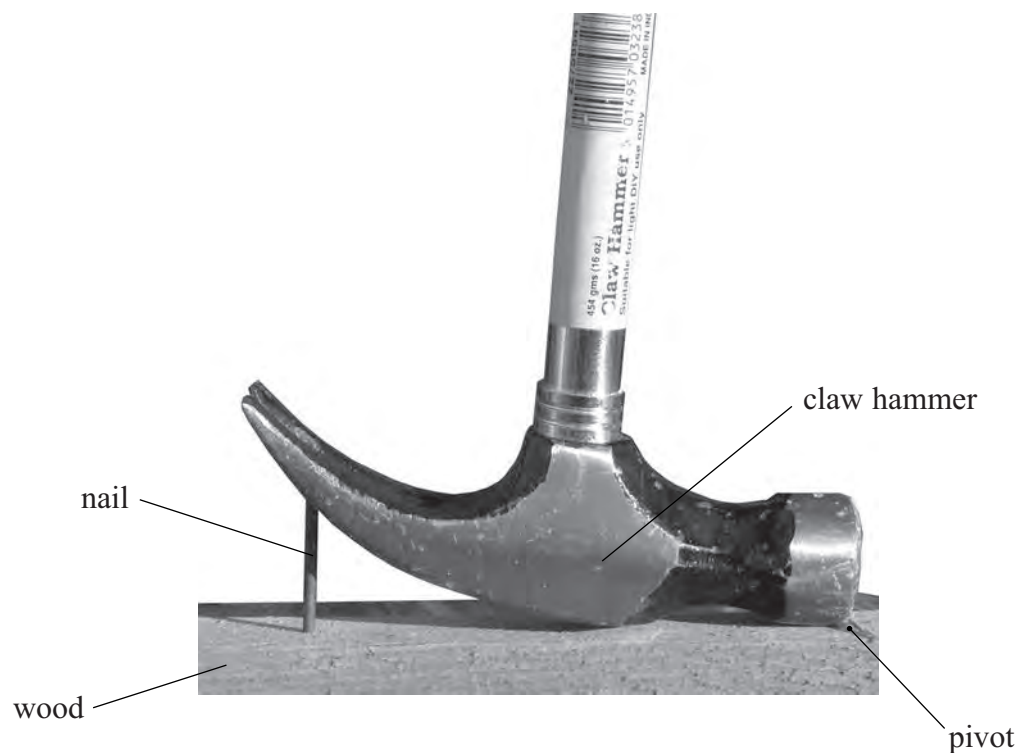**5** Photograph **C** shows how a student can use a claw hammer to pull a nail from a piece of wood.

Photograph C

(a) The mass of the hammer is 0.454 kg.

   (i)   Calculate the weight of the hammer.

   (2)

Weight = ... N

   (ii) From what point does this weight act?

   (1)

....

(b) Photograph **D** shows the directions of two other forces on the hammer.

F_1
(force on the hammer
from the hand)

distance 1

distance 2

pivot

F_2
(force on the hammer
from the nail)
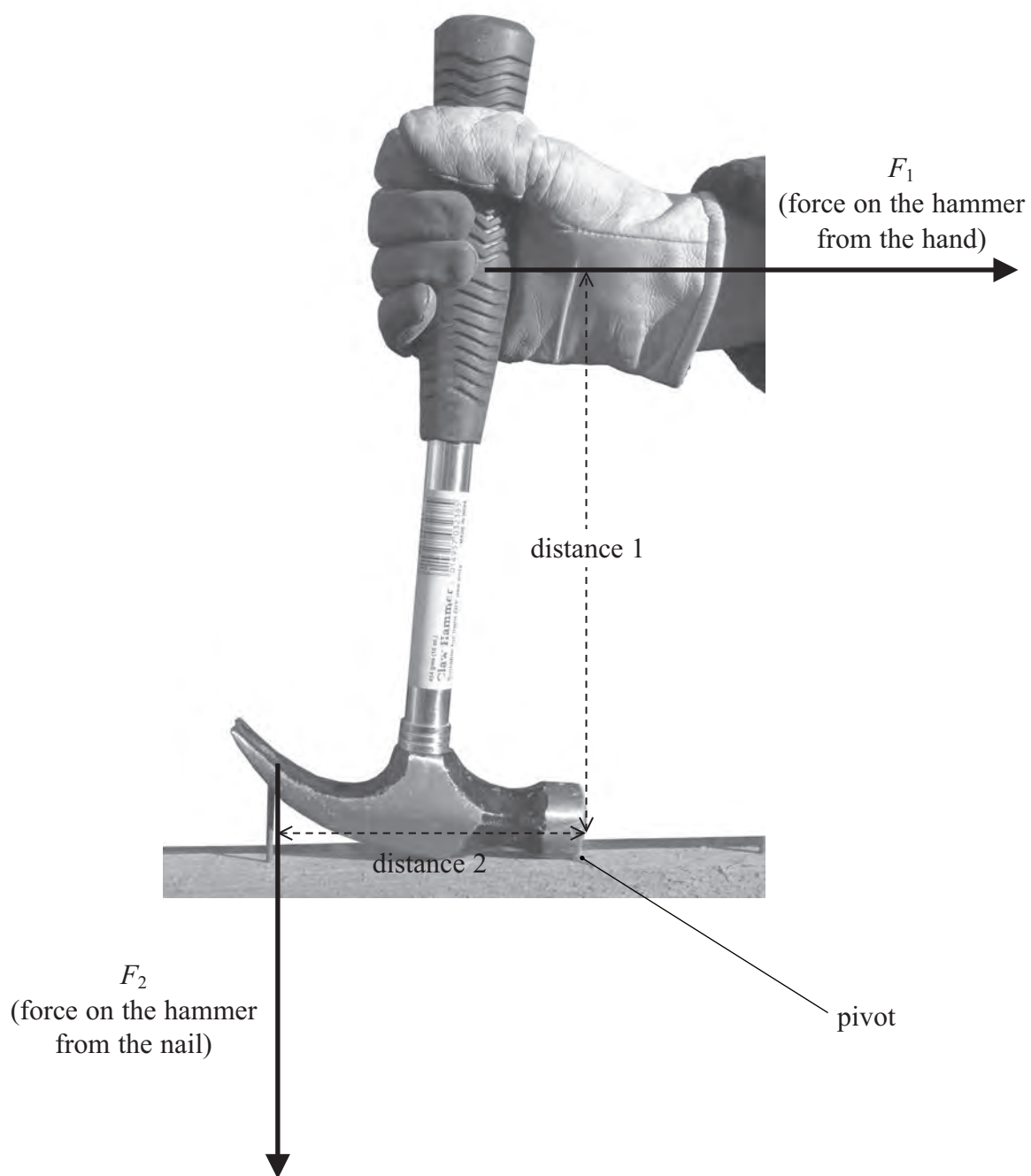
Photograph D

(i)   Draw an arrow on photograph **D** to show the force on the nail from the hammer.

(2)

(ii) Suggest **two** ways that the student could increase the moment on the hammer.

(2)

1 ....

....

2 ....

....

(Total for Question 5 = 7 marks)

P43330A01524