

1 A shop manager wants to advertise special offers on social media platforms.

The manager asks 100 customers which of type A , type B or type C they use.

Of these customers,

4 use all three types

16 do not use any of type A , type B or type C

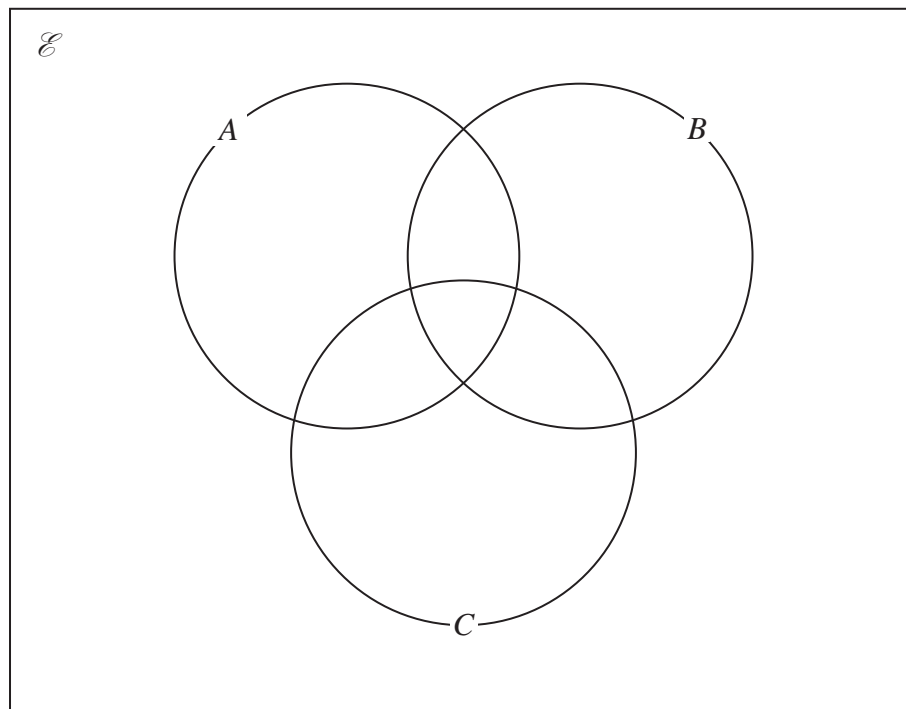
8 use both type A and type B , but not type C

14 use both type B and type C

62 in total use type A

all 20 who use type C also use at least one of type A and type B .

(a) Complete the Venn diagram for this information.



(4)

One of the customers is chosen at random.

Given that this customer uses type A ,

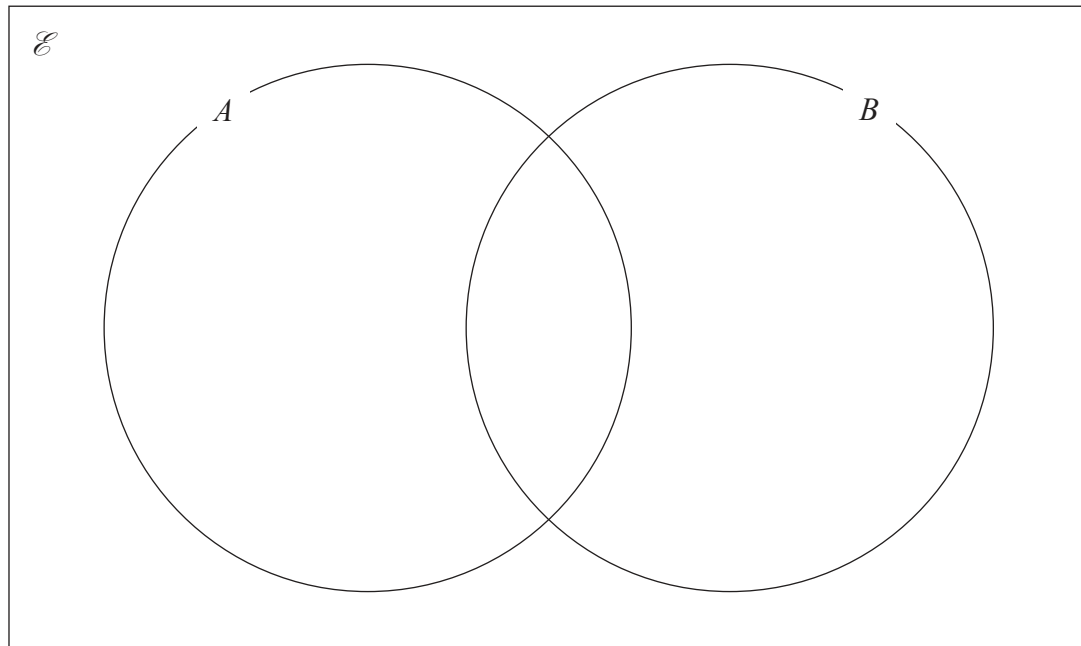
(b) find the probability that this customer also uses type B .

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(2)

(Total for Question 1 is 6 marks)

- 2 $\mathcal{E} = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$
 $A = \{\text{odd numbers}\}$
 $B = \{\text{square numbers}\}$

(a) Complete the Venn diagram for this information.



(3)

A number is chosen at random from the universal set \mathcal{E}

(b) Find the probability that this number is in the set B'

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(2)

(Total for Question 2 is 5 marks)
