

$$4(x-6) = 44$$

$$4x - 24 = 44$$

$$(+24) \quad (+24)$$

$$4x = 68$$

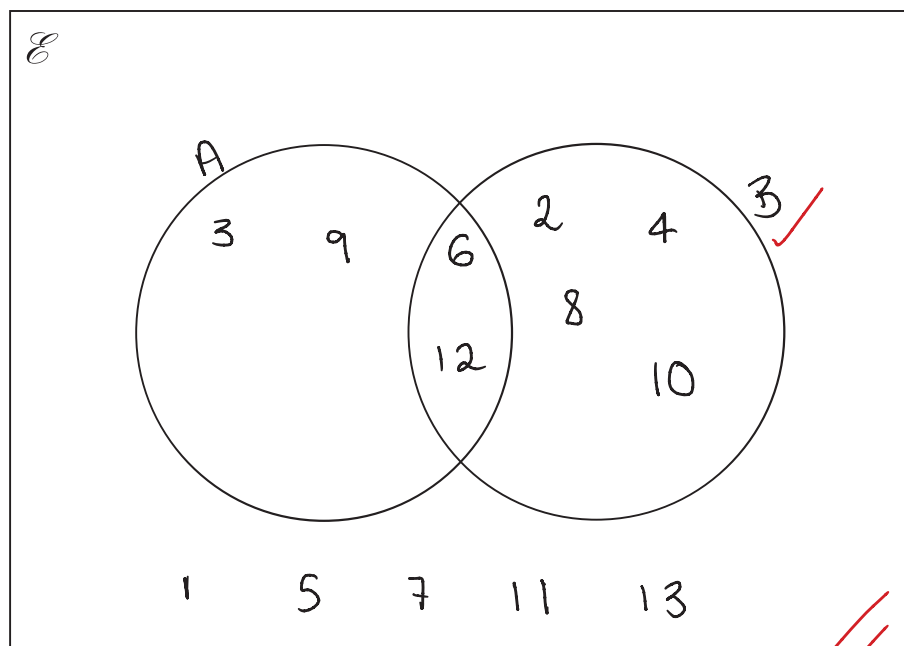
$$(\div 4) \quad (\div 4)$$

$$x = 17$$

$$= 17$$

1. $E = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13\}$
 $A = \{\text{multiples of 3}\}$
 $B = \{\text{even numbers}\}$

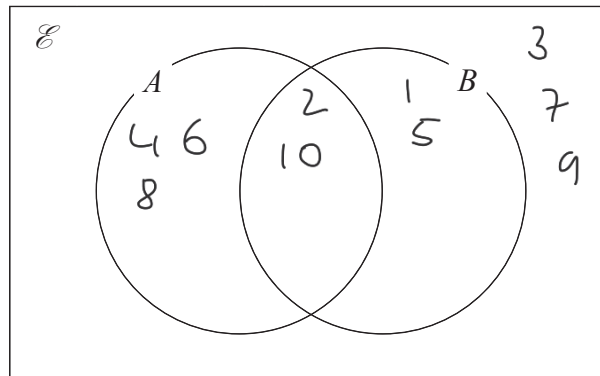
Complete the Venn diagram for this information.



(Total for Question is 4 marks)

2. $\mathcal{E} = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$
 $A = \{\text{even numbers}\}$
 $B = \{\text{factors of } 10\}$

(a) Complete the Venn diagram for this information.



$\checkmark_1 \checkmark_2 \checkmark_3$

(3)

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

(b) Find the probability that this number is in the set $A \cap B$

$$\frac{2}{10} \checkmark_1 \checkmark_2$$

(2)

(Total for Question is 5 marks)