Sets and Set Notation – www.m4ths.com

Question 1

$\varepsilon = \{Integers\ below\ 10\}$
$A = \{Square\ Numbers\}$
$B = \{Factors\ of\ 8\}$
(a) List the elements of each set using set notation:
(b) Find $n(\varepsilon), n(A)$ and $n(B)$
(c) Draw a Venn Diagram to represent the sets.
(d) One number is chosen at random, find:
(i) $P(A)$ (ii) $P(B)$ (iii) $P(A')$ (iv) $P(B')$
(e) List the elements of each set using set notation:
(i) $A \cup B$ (ii) $A \cap B$ (iii) $A' \cap B'$ (ii) $A' \cap B$
(f) One number is chosen at random, find:
(i) $P(A \cup B)$ (ii) $P(A \cap B)$ (iii) $P(A' \cap B)$(iv) $P(A \cap B')$

Question 2

$\varepsilon = \{1,2,3,6,7,8,11,12,13\}$
$A = \{Prime\ Numbers\}$
$B = \{Multiples\ of\ 3\}$
(a) List the elements of each set using set notation:
(b) Find $n(\varepsilon), n(A)$ and $n(B)$
(c) Draw a Venn Diagram to represent the sets.
(d) One number is chosen at random, find:
(i) $P(B)$ (ii) $P(A)$ (iii) $P(A')$ (iv) $P(B')$
(e) List the elements of each set using set notation:
(i) $A \cap B$ (ii) $A \cup B$ (iii) $A \cap B'$ (iv) $(A \cup B)'$
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Question 3

$\varepsilon = \{Numbers\ from\ 20 - 30\ inclusive\}$
$A = \{Cube\ numbers\}$
$B = \{Factors\ of\ 100\}$
(a) List the elements of each set using set notation:
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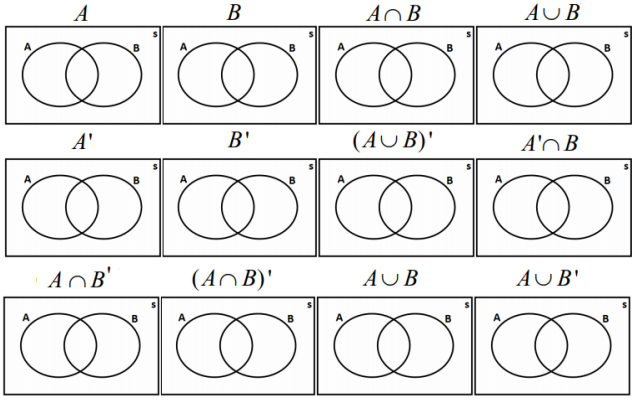
Question 4

Copy each Venn Diagram and shade the given set.



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