Set Notation

Describe these sets in words.

(a) {4, 8, 12, 16, 20, 24, 28}

(b) {1, 4, 9, 16, 25}

(c) {Europe, Asia, Africa,...}

(d) {1, 2, 3, 4, 6, 12}

(a) Multiples of 4 less than 30
(b) Square numbers less than 30
(c) Continents of the world
(d) Factors of 12

List the elements of the sets:

(a) Multiples of 7 less than 30

(b) Months of the year

(c) Factors of 25

(a) $\{7, 14, 21, 28\}$
(b) $\{J, F, M, A, M, J, Ju, S, O, N, D\}$
(c) $\{1, 5, 25\}$

$A = \{factors\ of\ 6\}$

$B = \{prime\ numbers\ less\ than\ 20\}$

$C = \{integers\ from\ 1\ to\ 10\}$

(a) List the elements of A

(b) List the elements of B

(c) List the elements of C

(d) Write down $A \cup B$

(e) Write down $B \cup C$

(f) Write down $A \cap B$

(g) Write down $C \cap A$

(a) $A = \{1, 2, 3, 6\}$
(b) $B = \{2, 3, 5, 7, 11, 13, 17, 19\}$
(c) $C = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$
(d) $\{1, 2, 3, 5, 6, 7, 11, 13, 17, 19\}$
(e) $\{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 17, 19\}$
(f) $\{2, 3\}$
(g) $\{1, 2, 3, 6\}$

$A = \{factors\ of\ 6\}$

$B = \{prime\ numbers\ less\ than\ 20\}$

$C = \{integers\ from\ 1\ to\ 10\}$

State whether the following are true or false?

(h) $9 \in C$ (i) $9 \in B$

(j) $9 \in A$ (k) $6 \notin C$

(l) $19 \in B$ (m) $1 \notin C$

(h) True   (i) False
(j) False   (k) False
(l) True   (m) False