

Fully-worked Solutions

FORM 1 **CHAPTER 11**

Summative Practice

Section A

1 $M = \{6, 9, 12, 15, 18\}$ n(M) = 5

Answer: C

2 n(B') = 19 - 11

Answer: B

3 $E = \{52, 56, 60, 64, 68, 72, 76\}$

 $F = \{54, 63, 72\}$

 $G = \{60, 72\}$

n(E) = 7

n(F) = 3

n(G) = 2

n(E) + n(F) + n(G) = 7 + 3 + 2

Answer: **D**

4 $E = \{52, 56, 60, 64, 68,$ **72** $, 76\}$

 $F = \{54, 63, 72\}$

 $G = \{60, 72\}$

Answer: D

5 $\xi = \{16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30\}$

 $K = \{20, 30\}$

 $J = \{20, 25, 30\}$

Maka, $\{16 \le x \le 30\}$

Answer: A

6 $K = \{20, 30\}$

 $J = \{20, 25, 30\}$

Maka, $K \subset J$

Section B

1 $R = \{1, 2, 3, 4, 6, 8, 12, 18, 24, 36, 48, 72, 144\}$

(a) 7 <u>∉</u> R

(b) 12 <u>∈</u> *R*

(c) 15 <u>∉</u> R

Answer: A

(d) 48 <u>∈</u> R

2 (a) X

(b) 🗸

(c) 🗸

(d) X

3 (a) P = Q'

(b) $R \subseteq Q$

(c) $n(Q) \ge n(R)$

(d) $(P+Q) = \xi$

Section C

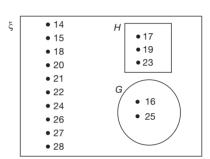
1 (a) (i) $X = \{L, A, T, I, H, N\}$

n(X) = 6

(ii) $Y = \{a, e, i, o, u\}$

n(Y) = 5

(b) (i) $G = \{16, 25\}$



(c) (i) $\xi = \{9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20\}$ $M = \{12, 18\}$

 $N = \{9, 12, 18\}$

 $M \subset N$

(ii)

