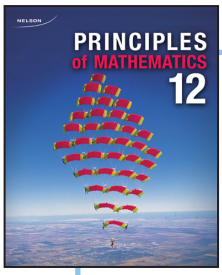
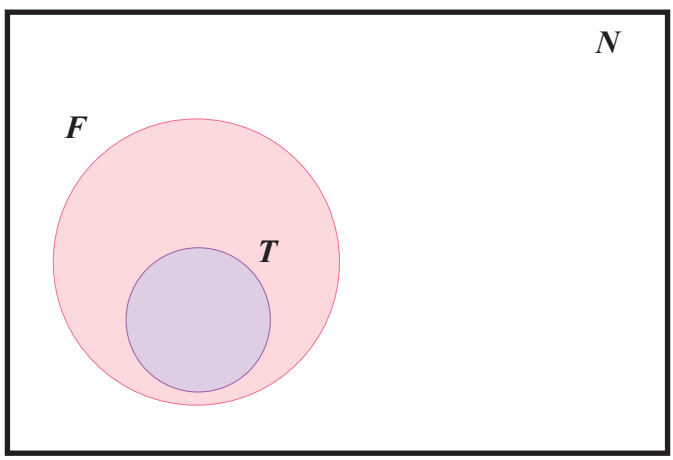


- If you have any difficulty with these solutions, please contact your teacher before continuing.

Page 9, *Your Turn*

- Natural numbers from 1 to 240 using set notation. $N = \{x \mid 1 \le x \le 240, x \in N\}$
- Multiples of 4. This goes only to 60 because that is the highest number that allows a multiple of 4 to be in the values of 1 to 240. $F = \{f \mid f = 4x, 1 \le x \le 60, x \in N\}$
- Multiples of 12. This only goes to 20 because that is the highest number that allows a multiple of 12 to be in the values of 1 to 240. $T = \{t \mid t = 12x, 1 \le x \le 20, x \in N\}$
- F' = {non-multiples of 4 from 1 to 240}

Relationship of the subsets can be shown $T \subset F \subset N$



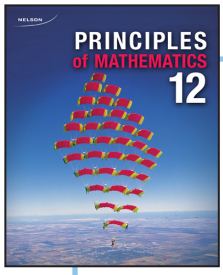
Page 12, *Your Turn*

Answers will vary for this solution. Contact your teacher to confirm that your answer is correct.

Possible solution: fur-bearing (subsets: cats, dogs, other), feathered, and scaly.

Page 11, *Your Turn*

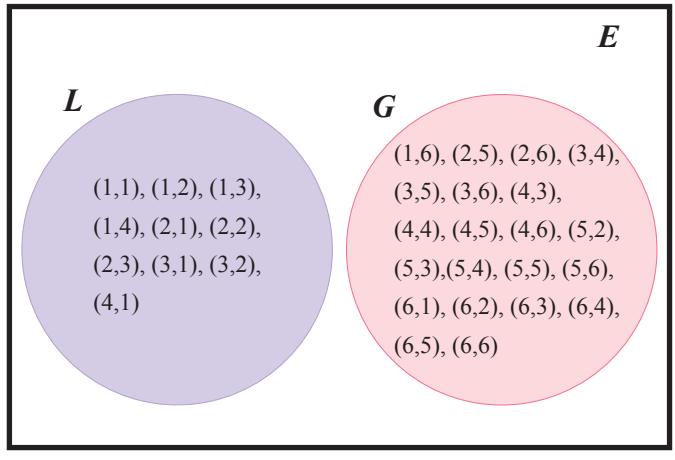
E' contains both the odd triangular numbers and numbers that are not triangular. The set O, the odd triangular numbers, is a subset of E'.



- If you have any difficulty with these solutions, please contact your teacher before continuing.

Page 13, *Your Turn*

a. E = {all sums of two six-sided dice}
L = {sums less than 6}
G = {sums greater than 6}



b. $n(E) = 36$
$n(L) = 10$
$n(G) = 21$

c. $n(L \text{ or } G) = n(L) + n(G)$
$n(L \text{ or } G) = 10 + 21$
$n(L \text{ or } G) = 31$

Verify: Because there are 5 ways that the sum can be 5 and there are 36 total sums, there are 36 – 5 = 31 ways that the sum can be greater than 6 or less than 6.