

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

1. a. There are many ways to word this solution. Contact your teacher to confirm that your answer is correct.

Possible Solution: M is the set of whole numbers greater than or equal to 1 and less than or equal to 8.

Possible Solution: M is the set of digits not equal to 0 or 9.

b. Answers will vary in appearance for this solution because sets are unordered. Contact your teacher to confirm that your answer is correct.

Possible Solution: $M = \{1, 2, 3, 4, 5, 6, 7, 8\}$

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

Possible Solution: $M = \{x | 1 \le x \le 8, x \in W\}$

Possible Solution: $M = \{x | x \text{ is a digit not equal to } 0 \text{ or } 9\}$

2. There are many examples possible for this solution. Contact your teacher to confirm that your example is correct.

When referencing set notation, { } represents the empty set, which is a set that has no elements.

Possible example: An empty set is the set of all spiders that are cats.

- 3. Sets A and B are equivalent because they both have a cardinality of 4. In other words, sets A and B have the same number of elements.
- Sets D and E are equal because they contain the same elements. That the elements are 4. not listed in the same order does not matter.