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≡ **Discrete Structures** CAB203_17se1   Assessment   Review Test Submission: Quiz 3

Review Test Submission: Quiz 3

User	Matthew McKague
Unit	Discrete Structures
Test	Quiz 3
Started	9/04/17 10:24 AM
Submitted	9/04/17 10:24 AM
Status	Completed
Attempt Score	0 out of 100 points
Time Elapsed	0 minute
Instructions	You will have two attempts for the quiz. The higher mark will count towards your final grade.
Results Displayed	Correct Answers, Incorrectly Answered Questions

Question 1   0 out of 5 points

$$1.5 \in \{x : 2x \in \mathbb{Z}\}$$

Correct Answer: ✅ True

Question 2   0 out of 5 points

$$8 \in \{2x : x = 3y, y \in \mathbb{N}\}$$

Correct Answer: ✅ False

Question 3   0 out of 5 points

$$\{1, 6, 3\} \subset \{1, 2, 5, 6\}$$

Correct Answer: ✅ False

Question 4   0 out of 5 points

$$\{1, 2, 6\} \subseteq \{x : x \geq 1, x \leq 7, x \in \mathbb{Z}\}$$

Correct Answer: ✅ True

Question 5   0 out of 5 points

$$\{2x : x \in \mathbb{Z}\} \subset \{y : 2y \in \mathbb{Z}\}$$

Correct Answer: ✅ True

Question 6   0 out of 5 points

The set $\{1, 2, 3\}$ is:

Correct Answer:
$$\{1, 2, 3, 4, 5\} \cap \{3, 7, 8, 2, 1\}$$
✅

Question 7   0 out of 5 points

$\{1, 3, 6, 7\} \cup \{6, 2, 3, 7\}$ is:

Correct Answer:
$$\{1, 2, 3, 6, 7\}$$
✅

Question 8   0 out of 5 points

$\{x : 2x \in \mathbb{N}\}$ is:

Correct Answer:
$$\{0.5, 1, 1.5, 2, 2.5, 3, \ldots\}$$
✅

Question 9   0 out of 5 points

With universe $U = \mathbb{N}$, the set $\{x : x^2 = 2\}$ is:

Correct Answer:
$$\emptyset$$
✅

Question 10   0 out of 5 points

With universe $U = \mathbb{N}$, the set $\overline{\{x : x^2 = 4\}}$ is:
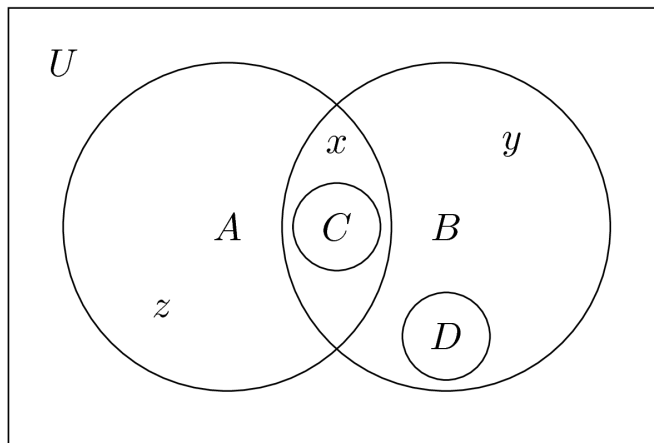
Correct Answer:

$$\mathbb{N} \setminus \{2\}$$

✅

Question 11

0 out of 5 points

The following Venn diagram applies for the next 6 questions.

$$C \subseteq A \setminus B$$

Correct Answer: ✅ False

Question 12

0 out of 5 points

$$y \in \overline{A}$$

Correct Answer: ✅ True

Question 13

0 out of 5 points

$$D \subseteq B \setminus A$$

Correct Answer: ✅ True

Question 14

0 out of 5 points

$$z \in A \cap B$$

Correct Answer: ✅ False

Question 15

0 out of 5 points

$$y \subseteq A \cup B$$

Correct Answer: False

Question 16

0 out of 5 points

$$x \in \overline{A \cap B}$$

Correct Answer: False

Question 17

0 out of 5 points

$$C \subseteq A \cap B$$

Correct Answer: True

Question 18

0 out of 5 points

Consider the following syllogism:

All cats are mammals

Cats have live young

Some mammals have live young

Choose the correct syllogism type for this syllogism, and whether or not it is valid.

Correct Answer:
$$A \subseteq B \text{ and } A \neq \emptyset$$
$$A \subseteq C$$
$$B \cap C \neq \emptyset$$

Valid

Question 19

0 out of 5 points

Consider the following syllogism:

All canines are mammals

My cat is a mammal

My cat is a canine

Choose the correct syllogism type for this syllogism, and whether or not it is valid.

Correct Answer:

$$A \subseteq B$$
$$\frac{x \in B}{x \in A}$$

Not valid

Question 20

0 out of 5 points

Consider the following syllogism

All grasses are plants

Pine trees are grasses

Some plants are pine trees

Which of the following statements about the syllogism is true?

Correct Answer: The syllogism has a valid type and a false premise, but the conclusion is true.

Sunday, 9 April 2017 10:25:40 AM AEST

← **OK**