Assignment 12

Due on 2021-04-14, 23:59 IST

The due date for submitting this assignment has passed.

Please see Canvas for the results of this assignment.

Question 1
Which of the following groups are simple?

(A) $Z_2$
(B) $S_3$
(C) $A_4$

Answer:
- (B) $S_3$
- (C) $A_4$

Question 2
Let $G$ be a group of order $p^2$, where $p$ is a prime. What is the structure of $G$?

Answer:
- $G$ is necessarily abelian.
- $G$ can be either cyclic or isomorphic to the dihedral group $D_{2p}$.

Question 3
Which of the following are isomorphic to $Z_2$?

(A) $Z_4$
(B) $S_3$
(C) $A_4$

Answer:
- (C) $A_4$

Question 4
Which of the following are isomorphic to $Z_2$?

(A) $Z_4$
(B) $S_3$
(C) $A_4$

Answer:
- (C) $A_4$

Question 5
Which of the following are isomorphic to $Z_2$?

(A) $Z_4$
(B) $S_3$
(C) $A_4$

Answer:
- (C) $A_4$

Question 6
Which of the following are isomorphic to $Z_2$?

(A) $Z_4$
(B) $S_3$
(C) $A_4$

Answer:
- (C) $A_4$

Question 7
Which of the following are isomorphic to $Z_2$?

(A) $Z_4$
(B) $S_3$
(C) $A_4$

Answer:
- (C) $A_4$

Question 8
Which of the following are isomorphic to $Z_2$?

(A) $Z_4$
(B) $S_3$
(C) $A_4$

Answer:
- (C) $A_4$