

Unit 6 - Week 4

Course outline
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Assignment 4

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-10-14, 23:59 IST.

NOTE: Please note that multiple options may be correct.

1) Which of the following numbers are solutions to the following system of simultaneous linear congruences: $n \equiv 1 \pmod{4}$, $n \equiv 2 \pmod{3}$? 1 point

- 137,
 161,
 209,
 233,
 281,
 353.

No, the answer is incorrect.
Score: 0

Accepted Answers:

- 137,
161,
209,
233,
281,
353.

2) Which of the following numbers are solutions to the following system of simultaneous linear congruences: $n \equiv 7 \pmod{9}$, $n \equiv 3 \pmod{4}$? 1 point

- 259,
 287,
 311,
 335,
 371,
 403.

No, the answer is incorrect.
Score: 0

Accepted Answers:

- 259,
403.

3) Which of the following numbers are solutions to the following system of simultaneous linear congruences: $3n \equiv 6 \pmod{12}$, $3n \equiv 1 \pmod{5}$? 1 point

- 422,
 482,
 512,
 562,
 592,
 662.

No, the answer is incorrect.
Score: 0

Accepted Answers:

- 422,
482,
562,
662.

4) Which of the following numbers are solutions to the following system of simultaneous linear congruences: $n \equiv 1 \pmod{4}$, $n \equiv 2 \pmod{3}$, $n \equiv 3 \pmod{5}$? 1 point

- 733,
 773,
 833,
 953,
 983,
 993.

No, the answer is incorrect.
Score: 0

Accepted Answers:

- 773,
833,
953,

5) Which of the following numbers are solutions to the following system of simultaneous linear congruences: $n \equiv 2 \pmod{7}$, $n \equiv 7 \pmod{9}$, $n \equiv 3 \pmod{4}$? 1 point

- 763,
 835,
 907,
 979,
 1087,
 1159.

No, the answer is incorrect.
Score: 0

Accepted Answers:

- 835,
1087,

6) Which of the following numbers are solutions to the following system of simultaneous linear congruences: $3n \equiv 6 \pmod{12}$, $2n \equiv 5 \pmod{7}$, $3n \equiv 1 \pmod{5}$? 1 point

- 662,
 762,
 782,
 902,
 972,
 992.

No, the answer is incorrect.
Score: 0

Accepted Answers:

- 762,
902,

7) Which of the following numbers are solutions to the following system of simultaneous linear congruences: $n \equiv 1 \pmod{5}$, $n \equiv 2 \pmod{7}$, $n \equiv 3 \pmod{9}$, $n \equiv 4 \pmod{11}$? 1 point

- 1551,
 1641,
 1731,
 1821,
 1911,
 1961.

No, the answer is incorrect.
Score: 0

Accepted Answers:

- 1731,

8) Which of the following numbers are solutions to the following system of simultaneous linear congruences: $2n \equiv 1 \pmod{3}$, $3n \equiv 1 \pmod{5}$, $4n \equiv 1 \pmod{7}$, $5n \equiv 1 \pmod{11}$? 1 point

- 1052,
 1157,
 1262,
 1367,
 1472,
 1577.

No, the answer is incorrect.
Score: 0

Accepted Answers:

- 1472,

9) For which of the following 3-tuples of integers (a, b, c) do we have a solution to the system of simultaneous linear congruences: $n \equiv a \pmod{3}$, $n \equiv b \pmod{4}$, $n \equiv c \pmod{12}$? 1 point

- (0, 2, 6),

 (1, 1, 5),

 (1, 3, 7),

 (0, 0, 8),

 (0, 1, 9),

 (1, 1, 10).

No, the answer is incorrect.
Score: 0

Accepted Answers:

- (0, 2, 6),
(1, 3, 7),
(0, 1, 9),

10) For which of the following 4-tuples of integers (a, b, c, d) do we have a solution to the system of simultaneous linear congruences: $n \equiv a \pmod{2}$, $n \equiv b \pmod{3}$, $n \equiv c \pmod{4}$, $n \equiv d \pmod{6}$? 1 point

- (1, 0, 3, 2),

 (0, 1, 0, 4),

 (0, 0, 3, 0),

 (1, 1, 2, 1),

 (0, 1, 2, 5),

 (1, 2, 3, 5).

No, the answer is incorrect.
Score: 0

Accepted Answers:

- (0, 1, 0, 4),
(1, 2, 3, 5).