

CS-2050-All-Sections CS 2050 Homework 7 (HOWARD, FAULKNER, ELLEN)

Vidit Dharmendra Pokharna

TOTAL POINTS

100.5 / 100

QUESTION 1

1 Question 1 20 / 20

! - 0 pts $x = 52$ or $x \equiv 52 \pmod{\sim 280}$

and showed work using the Chinese

Remainder Theorem (refer to answer key)

- 5 pts Does not check/indicate whether 5, 7, 8 are pairwise relatively prime.

Math errors

- 5 pts 1 Math error

- 10 pts 2 Math errors

- 15 pts 3+ Math errors

- 10 pts Major jump in work / logic

- 20 pts No work using Chinese Remainder theorem is shown

- 20 pts Incorrect / No Answer

- 10 pts Click here to replace this description.

QUESTION 2

2 Question 2 10 / 10

! - 0 pts Pineapple pizza is simply superior than normal pizza

- 8 pts Shift in wrong direction

Incorrect characters

- 2 pts 1 Incorrect characters

- 4 pts 2 Incorrect characters

- 6 pts 3 Incorrect characters

- 8 pts 4+ Incorrect characters

- 10 pts Incorrect / No Answer

QUESTION 3

3 Question 3 10 / 10

! - 0 pts IFEEZV DRUV KYZJ HLVJKZFE

- 8 pts Shift in wrong direction

Incorrect characters

- 2 pts 1 Incorrect characters

- 4 pts 2 Incorrect characters

- 6 pts 3 Incorrect characters

- 8 pts 4+ Incorrect characters

- 10 pts Incorrect / No Answer

QUESTION 4

4 Question 4 10 / 10

! - 0 pts SIAOL EMATD OHINS XEXXX

- 8 pts Shift in wrong direction

Incorrect characters

- 2 pts 1 Incorrect characters

- 4 pts 2 Incorrect characters

- 6 pts 3 Incorrect characters

- 8 pts 4+ Incorrect characters

- 10 pts Incorrect / No Answer

QUESTION 5

5 Question 5 10 / 10

! - 0 pts *twenty fifty*

ff - 8 pts Shift in wrong direction

Incorrect characters

ff - 2 pts 1 Incorrect characters

ff - 4 pts 2 Incorrect characters

ff - 6 pts 3 Incorrect characters

ff - 8 pts 4+ Incorrect characters

ff - 10 pts Incorrect / No Answer

QUESTION 6

6 Question 6 15 / 15

! - 0 pts *correct final answer (refer to answer key before using this rubric item)*

ff - 6 pts Minor Error

ff - 12 pts Major Error

ff - 15 pts Incorrect / No Answer

QUESTION 7

7 Question 7 15 / 15

! - 0 pts *Showed work for calculating d and correct final answer (refer to answer key before using this rubric item)*

ff - 5 pts work shown using incorrect d

ff - 7 pts Did not show working for d

ff - 6 pts Minor error

ff - 12 pts Major Error

ff - 15 pts Incorrect / No Answer

QUESTION 8

8 Question 8 8 / 10

ff - 0 pts Correct

ff - 1 pts Did not define / Incorrectly defined

$P(n)$

ff - 2 pts Did not clearly label Base case, IH, and IS

Basis Step (cap at -3)

ff - 2 pts Minor Math Error

ff - 3 pts Did not use $P(1)$ as base case

ff - 3 pts No basis step

Inductive Step (Cap at -5)

ff - 1 pts Using n in the inductive step instead of a new variable

! - 2 pts *Minor error in math / logic*

ff - 4 pts Major error in math / logic

ff - 2 pts Does not explicitly assume IH that

$P(k)$ is true for some $k \geq 1$

ff - 2 pts Not citing inductive hypothesis when it is used

ff - 2.5 pts Did not provide any reasoning

ff - 5 pts Assumed $P(k+1)$ is true

ff - 5 pts Not reaching $P(k+1)$

ff - 5 pts Assumed IH correctly, but did not attempt to reach $P(k+1)$

ff - 2 pts Missing or incorrect inductive step conclusion (e.g. only concluded $P(k+1)$ instead of $(\forall j \geq k) P(j) \rightarrow P(k+1)$ (if doing strong induction))

Conclusion (Cap at -2)

ff - 1 pts No / Incorrect mention of $P(n)$ or domain of n

ff - 1 pts No / incorrect mention of principle of math induction

ff - 10 pts Did not use Math Induction

ff - 10 pts No Answer

ff - 10 pts $P(k)$ and $P(k+1)$ are predicates (boolean

statements) so cannot equal a mathematical expression

QUESTION 9

9 Page Matching 0 / 0

! - 0 pts *Correct*

ff - 5 pts *Incorrect*

QUESTION 10

10 On Time 2.5 / 0

! + 2.5 pts *On Time (Before Thursday)*

ff - 0 pts *On Time (Friday)*

ff - 10 pts *1 day late*

ff - 25 pts *2 days late*

1 Question 1 20 / 20

! - 0 pts $x = 52$ or $x \equiv 52 \pmod{280}$ and showed work using the Chinese Remainder Theorem (refer to answer key)

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Math errors

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ff - 15 pts 3+ Math errors

ff - 10 pts Major jump in work / logic

ff - 20 pts No work using Chinese Remainder theorem is shown

ff - 20 pts Incorrect / No Answer

ff - 10 pts Click here to replace this description.

2 Question 2 10 / 10

! - 0 pts *Pineapple pizza is simply superior than normal pizza*

⚐ - 8 pts Shift in wrong direction

Incorrect characters

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⚐ - 6 pts 3 Incorrect characters

⚐ - 8 pts 4+ Incorrect characters

⚐ - 10 pts Incorrect / No Answer

3 Question 3 10 / 10

! - 0 pts *IFEEZV DRUV KYZJ HLVJKZFE*

⚑ - 8 pts Shift in wrong direction

Incorrect characters

⚑ - 2 pts 1 Incorrect characters

⚑ - 4 pts 2 Incorrect characters

⚑ - 6 pts 3 Incorrect characters

⚑ - 8 pts 4+ Incorrect characters

⚑ - 10 pts Incorrect / No Answer



4 Question 4 10 / 10

! - 0 pts *SIAOL EMATD OHINS XEXXX*

⚑ - 8 pts Shift in wrong direction

Incorrect characters

⚑ - 2 pts 1 Incorrect characters

⚑ - 4 pts 2 Incorrect characters

⚑ - 6 pts 3 Incorrect characters

⚑ - 8 pts 4+ Incorrect characters

⚑ - 10 pts Incorrect / No Answer

5 Question 5 10 / 10

! - 0 pts *twenty fifty*

⌘ - 8 pts Shift in wrong direction

Incorrect characters

⌘ - 2 pts 1 Incorrect characters

⌘ - 4 pts 2 Incorrect characters

⌘ - 6 pts 3 Incorrect characters

⌘ - 8 pts 4+ Incorrect characters

⌘ - 10 pts Incorrect / No Answer



6 Question 6 15 / 15

! - 0 pts correct final answer (refer to answer key before using this rubric item)

££ - 6 pts Minor Error

££ - 12 pts Major Error

££ - 15 pts Incorrect / No Answer



7 Question 7 15 / 15

! - 0 pts *Showed work for calculating \$\$\$ and correct final answer (refer to answer key before using this rubric item)*

££ - 5 pts work shown using incorrect \$\$\$

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££ - 15 pts Incorrect / No Answer





8 Question 8 8 / 10

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ff - 10 pts Did not use Math Induction

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ff $P(k)$ and $P(k+1)$ are predicates (boolean statements) so cannot equal a mathematical expression

9 Page Matching 0 / 0

! - 0 pts *Correct*

ff - 5 pts *Incorrect*



10 On Time 2.5 / 0

! + 2.5 pts On Time (Before Thursday)

££ - 0 pts On Time (Friday)

££ - 10 pts 1 day late

££ - 25 pts 2 days late

