Question 1 [25 marks]

0: 76 mod 4 = 0

1: 89 mod 10 = *9*

2: 68 mod 10 = *8*

3: 50 mod 7 = *1*

4: 62 mod 7 = *6*

5: 98 mod 3 = *2*

6: 60 mod 3 = *0*

7: 97 mod 10 = *7*

8: 54 mod 2 = *0*

9: 59 mod 6 = *5*

10: 96 mod 8 = *0*

11: 82 mod 8 = *2*

12: 92 mod 4 = *0*

13: 97 mod 8 = *1*

14: 50 mod 9 = *5*

15: 70 mod 8 = *6*

16: 73 mod 3 = *1*

17: 66 mod 5 = *1*

18: 82 mod 2 = *0*

19: 76 mod 10 = *6*

20: 98 mod 4 = *2*

21: 57 mod 6 = *3*

22: 65 mod 9 = *2*

23: 95 mod 2 = *1*

24: 59 mod 2 = *1*

25: 100 mod 9 = *1*

mod_50to100_1to10

Question 2 [25 marks]

0: 55 mod 6 = 1

1: 90 mod 6 = *0*

2: 91 mod 5 = *1*

3: 89 mod 3 = *2*

4: 62 mod 5 = *2*

5: 81 mod 3 = *0*

6: 96 mod 7 = *5*

7: 56 mod 9 = *2*

8: 83 mod 4 = *3*

9: 92 mod 10 = *2*

10: 83 mod 2 = *1*

11: 75 mod 8 = *3*

12: 97 mod 1 = *0*

13: 82 mod 9 = *1*

14: 70 mod 2 = *0*

15: 98 mod 3 = *2*

16: 79 mod 3 = *1*

17: 62 mod 6 = *2*

18: 87 mod 6 = *3*

19: 56 mod 6 = *2*

20: 79 mod 6 = *1*

21: 93 mod 1 = *0*

22: 71 mod 2 = *1*

23: 87 mod 3 = *0*

24: 59 mod 8 = *3*

25: 72 mod 4 = *0*

mod_50to100_1to10

Question 3 [25 marks]

0: 86 mod 4 = 2

1: 54 mod 1 = 0

2: 91 mod 6 = 1

3: 94 mod 5 = 4

4: 89 mod 10 = 9

5: 84 mod 1 = 0

6: 53 mod 8 = 5

7: 82 mod 5 = 2

8: 52 mod 7 = 3

9: 78 mod 9 = 6

10: 75 mod 8 = 3

11: 58 mod 2 = 0

12: 70 mod 2 = 0

13: 98 mod 3 = 2

14: 75 mod 7 = 5

15: 83 mod 10 = 3

16: 84 mod 9 = 3

17: 82 mod 5 = 2

18: 96 mod 5 = 1

19: 64 mod 5 = 4

20: 80 mod 6 = 2

21: 62 mod 8 = 6

22: 81 mod 9 = 0

23: 60 mod 9 = 6

24: 95 mod 9 = 5

25: 80 mod 5 = 0

mod_50to100_1to10

Question 4 [25 marks]

0: 92 mod 9 = 2

1: 65 mod 10 = 5

2: 86 mod 4 = 2

3: 55 mod 3 = 1

4: 73 mod 8 = 1

5: 53 mod 9 = 8

6: 71 mod 5 = 1

7: 97 mod 2 = 1

8: 73 mod 3 = 1

9: 87 mod 5 = 2

10: 60 mod 9 = 6

11: 53 mod 9 = 8

12: 51 mod 10 = 1

13: 93 mod 2 = 1

14: 89 mod 3 = 2

15: 56 mod 8 = 0

16: 97 mod 2 = 1

17: 89 mod 7 = 5

18: 51 mod 4 = 3

19: 89 mod 2 = 1

20: 81 mod 10 = 1

21: 94 mod 1 = 0

22: 67 mod 1 = 0

23: 88 mod 9 = 7

24: 68 mod 10 = 8

25: 96 mod 6 = 0

mod_50to100_1to10

Question 5 [25 marks]

0: 99 mod 6 = 3

1: 50 mod 3 = 2

2: 52 mod 6 = 4

3: 91 mod 1 = 0

4: 73 mod 10 = 3

5: 94 mod 7 = 3

6: 98 mod 1 = 0

7: 87 mod 6 = 3

8: 72 mod 4 = 0

9: 55 mod 1 = 0

10: 92 mod 7 = 1

11: 98 mod 9 = 8

12: 63 mod 2 = 1

13: 56 mod 5 = 1

14: 80 mod 7 = 3

15: 67 mod 4 = 3

16: 51 mod 7 = 2

17: 90 mod 3 = 0

18: 95 mod 4 = 3

19: 76 mod 4 = 0

20: 72 mod 6 = 0

21: 70 mod 5 = 0

22: 100 mod 9 = 1

23: 85 mod 2 = 1

24: 62 mod 7 = 6

25: 99 mod 6 = 3

mod_50to100_1to10

Question 6 [25 marks]

0: 52 mod 7 = 3

1: 99 mod 3 = 0

2: 64 mod 7 = 1

3: 78 mod 4 = 2

4: 65 mod 3 = 2

5: 57 mod 4 = 1

6: 73 mod 7 = 3

7: 73 mod 8 = 1

8: 65 mod 5 = 0

9: 73 mod 6 = 1

10: 90 mod 4 = 2

11: 92 mod 5 = 2

12: 79 mod 2 = 1

13: 76 mod 4 = 0

14: 71 mod 4 = 3

15: 76 mod 4 = 0

16: 61 mod 4 = 1

17: 67 mod 4 = 3

18: 57 mod 5 = 2

19: 59 mod 5 = 4

20: 94 mod 6 = 4

21: 52 mod 1 = 0

22: 63 mod 1 = 0

23: 81 mod 10 = 1

24: 75 mod 5 = 0

25: 88 mod 4 = 0

mod_50to100_1to10

Question 7 [25 marks]

0: 93 mod 1 = 0

1: 60 mod 7 = *4*

2: 82 mod 1 = *0*

3: 54 mod 9 = *0*

4: 76 mod 4 = *0*

5: 94 mod 7 = *3*

6: 59 mod 2 = *1*

7: 100 mod 4 = *0*

8: 71 mod 3 = *2*

9: 91 mod 1 = *0*

10: 62 mod 9 = *8*

11: 98 mod 8 = *2*

12: 80 mod 1 = *0*

13: 69 mod 4 = *1*

14: 78 mod 1 = *0*

15: 87 mod 3 = *0*

16: 76 mod 4 = *0*

17: 64 mod 10 = *4*

18: 54 mod 3 = *0*

19: 55 mod 1 = *0*

20: 84 mod 3 = *0*

21: 88 mod 7 = *4*

22: 93 mod 9 = *3*

23: 79 mod 10 = *9*

24: 75 mod 3 = *0*

25: 91 mod 5 = *1*

mod_50to100_1to10

Question 8 [25 marks]

0: 79 mod 1 = 0

1: 68 mod 4 = *0*

2: 57 mod 5 = *2*

3: 77 mod 10 = *7*

4: 83 mod 10 = *3*

5: 60 mod 8 = *4*

6: 91 mod 10 = *1*

7: 98 mod 1 = *0*

8: 100 mod 4 = *0*

9: 92 mod 7 = *1*

10: 61 mod 4 = *1*

11: 98 mod 5 = *3*

12: 96 mod 1 = *0*

13: 90 mod 1 = *0*

14: 69 mod 6 = *3*

15: 57 mod 7 = *1*

16: 69 mod 2 = *1*

17: 80 mod 4 = *0*

18: 50 mod 7 = *1*

19: 81 mod 6 = *3*

20: 100 mod 6 = *4*

21: 79 mod 8 = *7*

22: 91 mod 9 = *1*

23: 56 mod 6 = *2*

24: 50 mod 6 = *2*

25: 76 mod 8 = *4*

mod_50to100_1to10

Question 9   [25 marks]

0: 78 mod 3 = 0

1: 76 mod 1 = *0*

2: 54 mod 9 = *0*

3: 65 mod 2 = *1*

4: 52 mod 7 = *3*

5: 58 mod 10 = *8*

6: 60 mod 2 = *0*

7: 81 mod 9 = *0*

8: 93 mod 10 = *3*

9: 75 mod 4 = *3*

10: 91 mod 7 = *0*

11: 78 mod 8 = *6*

12: 54 mod 2 = *0*

13: 77 mod 3 = *2*

14: 75 mod 5 = *0*

15: 81 mod 5 = *1*

16: 55 mod 7 = *6*

17: 74 mod 1 = *0*

18: 94 mod 2 = *0*

19: 98 mod 1 = *0*

20: 55 mod 3 = *1*

21: 92 mod 2 = *0*

22: 98 mod 9 = *8*

23: 56 mod 4 = *0*

24: 92 mod 5 = *2*

25: 53 mod 4 = *1*

mod_50to100_1to10

Question 10   [25 marks]

0: 95 mod 5 = 0

1: 57 mod 3 = *0*

2: 67 mod 1 = *0*

3: 78 mod 8 = *6*

4: 57 mod 10 = *7*

5: 61 mod 9 = *7*

6: 68 mod 5 = *3*

7: 60 mod 9 = *6*

8: 84 mod 9 = *3*

9: 90 mod 1 = *0*

10: 99 mod 8 = *3*

11: 67 mod 1 = *0*

12: 97 mod 1 = *0*

13: 68 mod 2 = *0*

14: 85 mod 3 = *1*

15: 53 mod 9 = *8*

16: 94 mod 8 = *6*

17: 84 mod 1 = *0*

18: 88 mod 6 = *4*

19: 86 mod 8 = *6*

20: 79 mod 4 = *3*

21: 70 mod 2 = *0*

22: 67 mod 9 = *4*

23: 51 mod 6 = *3*

24: 56 mod 9 = *2*

25: 97 mod 3 = *1*

mod_50to100_1to10

Question 11 [25 marks]

0: $180 \bmod 11 = 4$

1: $177 \bmod 12 = 9$

2: $169 \bmod 19 = 17$

3: $111 \bmod 20 = 11$

4: $170 \bmod 10 = 0$

5: $179 \bmod 14 = 11$

6: $121 \bmod 18 = 13$

7: $187 \bmod 12 = 7$

8: $146 \bmod 14 = 6$

9: $172 \bmod 10 = 2$

10: $183 \bmod 12 = 3$

11: $188 \bmod 20 = 8$

12: $189 \bmod 10 = 9$

13: $117 \bmod 14 = 5$

14: $171 \bmod 13 = 2$

15: $194 \bmod 19 = 4$

16: $194 \bmod 10 = 4$

17: $142 \bmod 16 = 14$

18: $143 \bmod 16 = 15$

19: $189 \bmod 20 = 9$

20: $132 \bmod 18 = 6$

21: $193 \bmod 20 = 13$

22: $172 \bmod 14 = 4$

23: $163 \bmod 17 = 10$

24: $100 \bmod 16 = 4$

25: $184 \bmod 18 = 4$

mod_100to200_10to20

Question 12 [25 marks]

0: $186 \bmod 18 = 6$

1: $122 \bmod 16 = 10$

2: $181 \bmod 12 = 1$

3: $121 \bmod 17 = 2$

4: $189 \bmod 15 = 9$

5: $125 \bmod 11 = 4$

6: $131 \bmod 14 = 5$

7: $108 \bmod 17 = 6$

8: $106 \bmod 19 = 11$

9: $114 \bmod 19 = 0$

10: $150 \bmod 14 = 10$

11: $108 \bmod 12 = 0$

12: $149 \bmod 17 = 13$

13: $112 \bmod 16 = 0$

14: $178 \bmod 10 = 8$

15: $158 \bmod 17 = 5$

16: $188 \bmod 18 = 8$

17: $192 \bmod 17 = 5$

18: $165 \bmod 18 = 3$

19: $152 \bmod 14 = 12$

20: $140 \bmod 19 = 7$

21: $125 \bmod 17 = 6$

22: $161 \bmod 19 = 9$

23: $189 \bmod 17 = 2$

24: $197 \bmod 11 = 10$

25: $111 \bmod 17 = 9$

mod_100to200_10to20

Question 13 [25 marks]

0: 163 mod 12 = 7

1: 199 mod 18 = *1*

2: 130 mod 16 = *2*

3: 168 mod 19 = *16*

4: 137 mod 11 = *5*

5: 154 mod 15 = *4*

6: 157 mod 15 = *7*

7: 186 mod 20 = *6*

8: 190 mod 17 = *3*

9: 141 mod 13 = *11*

10: 157 mod 10 = *7*

11: 117 mod 12 = *9*

12: 104 mod 18 = *14*

13: 165 mod 19 = *13*

14: 141 mod 13 = *11*

15: 110 mod 17 = *8*

16: 151 mod 16 = *7*

17: 192 mod 17 = *5*

18: 128 mod 14 = *2*

19: 124 mod 16 = *12*

20: 182 mod 13 = *0*

21: 173 mod 17 = *3*

22: 165 mod 13 = *9*

23: 141 mod 17 = *5*

24: 169 mod 17 = *16*

25: 163 mod 18 = *1*

mod_100to200_10to20

Question 14 [25 marks]

0: 152 mod 14 = 12

1: 143 mod 10 = *3*

2: 110 mod 15 = *5*

3: 164 mod 19 = *12*

4: 141 mod 19 = *8*

5: 174 mod 18 = *12*

6: 125 mod 13 = *8*

7: 185 mod 19 = *14*

8: 160 mod 17 = *7*

9: 152 mod 11 = *9*

10: 121 mod 12 = *1*

11: 144 mod 16 = *0*

12: 100 mod 20 = *0*

13: 185 mod 13 = *3*

14: 116 mod 20 = *16*

15: 158 mod 18 = *14*

16: 120 mod 12 = *0*

17: 160 mod 10 = *0*

18: 133 mod 17 = *14*

19: 100 mod 16 = *4*

20: 162 mod 15 = *12*

21: 186 mod 20 = *6*

22: 184 mod 18 = *4*

23: 186 mod 18 = *6*

24: 196 mod 19 = *6*

25: 125 mod 15 = *5*

mod_100to200_10to20

Question 15 [25 marks]

0: $186 \bmod 18 = 6$

1: $189 \bmod 17 = 2$

2: $103 \bmod 13 = 12$

3: $162 \bmod 15 = 12$

4: $146 \bmod 20 = 6$

5: $115 \bmod 12 = 7$

6: $153 \bmod 17 = 0$

7: $129 \bmod 10 = 9$

8: $101 \bmod 12 = 5$

9: $174 \bmod 17 = 4$

10: $132 \bmod 15 = 12$

11: $102 \bmod 11 = 3$

12: $184 \bmod 13 = 2$

13: $122 \bmod 11 = 1$

14: $193 \bmod 13 = 11$

15: $129 \bmod 14 = 3$

16: $165 \bmod 17 = 12$

17: $165 \bmod 16 = 5$

18: $109 \bmod 15 = 4$

19: $125 \bmod 17 = 6$

20: $178 \bmod 11 = 2$

21: $138 \bmod 15 = 3$

22: $187 \bmod 19 = 16$

23: $100 \bmod 13 = 9$

24: $195 \bmod 19 = 5$

25: $184 \bmod 14 = 2$

mod_100to200_10to20

Question 16 [25 marks]

0: $160 \bmod 10 = 0$

1: $183 \bmod 18 = 3$

2: $192 \bmod 12 = 0$

3: $136 \bmod 20 = 16$

4: $107 \bmod 13 = 3$

5: $103 \bmod 20 = 3$

6: $111 \bmod 12 = 3$

7: $148 \bmod 14 = 8$

8: $171 \bmod 14 = 3$

9: $143 \bmod 14 = 3$

10: $198 \bmod 18 = 0$

11: $198 \bmod 13 = 3$

12: $167 \bmod 11 = 2$

13: $107 \bmod 13 = 3$

14: $148 \bmod 12 = 4$

15: $179 \bmod 16 = 3$

16: $107 \bmod 20 = 7$

17: $128 \bmod 13 = 11$

18: $146 \bmod 11 = 3$

19: $111 \bmod 18 = 3$

20: $133 \bmod 16 = 5$

21: $102 \bmod 13 = 11$

22: $167 \bmod 16 = 7$

23: $184 \bmod 14 = 2$

24: $104 \bmod 18 = 14$

25: $124 \bmod 20 = 4$

mod_100to200_10to20

Question 17 [25 marks]

0: $139 \bmod 11 = 7$

1: $131 \bmod 18 = 5$

2: $138 \bmod 17 = 2$

3: $111 \bmod 18 = 3$

4: $175 \bmod 17 = 5$

5: $163 \bmod 12 = 7$

6: $132 \bmod 19 = 18$

7: $199 \bmod 10 = 9$

8: $116 \bmod 16 = 4$

9: $121 \bmod 12 = 1$

10: $131 \bmod 19 = 17$

11: $147 \bmod 14 = 7$

12: $199 \bmod 16 = 7$

13: $185 \bmod 13 = 3$

14: $166 \bmod 10 = 6$

15: $172 \bmod 15 = 7$

16: $145 \bmod 17 = 9$

17: $169 \bmod 16 = 9$

18: $125 \bmod 19 = 11$

19: $172 \bmod 16 = 12$

20: $198 \bmod 13 = 3$

21: $132 \bmod 14 = 6$

22: $162 \bmod 11 = 8$

23: $133 \bmod 15 = 13$

24: $125 \bmod 13 = 8$

25: $189 \bmod 13 = 7$

mod_100to200_10to20

Question 18 [25 marks]

0: $169 \bmod 15 = 4$

1: $164 \bmod 15 = 14$

2: $150 \bmod 14 = 10$

3: $179 \bmod 14 = 11$

4: $105 \bmod 20 = 5$

5: $164 \bmod 18 = 2$

6: $193 \bmod 16 = 1$

7: $139 \bmod 14 = 13$

8: $182 \bmod 19 = 11$

9: $137 \bmod 15 = 2$

10: $200 \bmod 14 = 4$

11: $150 \bmod 20 = 10$

12: $116 \bmod 17 = 14$

13: $121 \bmod 19 = 7$

14: $146 \bmod 16 = 2$

15: $192 \bmod 19 = 2$

16: $178 \bmod 19 = 7$

17: $137 \bmod 15 = 2$

18: $200 \bmod 18 = 2$

19: $137 \bmod 15 = 2$

20: $143 \bmod 10 = 3$

21: $110 \bmod 14 = 12$

22: $151 \bmod 15 = 1$

23: $136 \bmod 12 = 4$

24: $153 \bmod 17 = 0$

25: $180 \bmod 15 = 0$

mod_100to200_10to20

Question 19   [25 marks]

0: $100 \bmod 19 = 5$

1: $154 \bmod 13 = 11$

2: $132 \bmod 15 = 12$

3: $120 \bmod 10 = 0$

4: $174 \bmod 11 = 9$

5: $157 \bmod 13 = 1$

6: $131 \bmod 10 = 1$

7: $175 \bmod 14 = 7$

8: $114 \bmod 16 = 2$

9: $142 \bmod 15 = 7$

10: $150 \bmod 16 = 6$

11: $144 \bmod 17 = 8$

12: $131 \bmod 19 = 17$

13: $167 \bmod 18 = 5$

14: $196 \bmod 14 = 0$

15: $162 \bmod 20 = 2$

16: $138 \bmod 14 = 12$

17: $193 \bmod 12 = 1$

18: $122 \bmod 13 = 5$

19: $191 \bmod 15 = 11$

20: $169 \bmod 19 = 17$

21: $190 \bmod 17 = 3$

22: $184 \bmod 12 = 4$

23: $169 \bmod 19 = 17$

24: $110 \bmod 11 = 0$

25: $106 \bmod 15 = 1$

mod_100to200_10to20

Question 20   [25 marks]

0: $183 \bmod 13 = 1$

1: $161 \bmod 18 = 17$

2: $188 \bmod 16 = 12$

3: $144 \bmod 17 = 8$

4: $135 \bmod 19 = 2$

5: $169 \bmod 16 = 9$

6: $186 \bmod 11 = 10$

7: $142 \bmod 14 = 2$

8: $162 \bmod 12 = 6$

9: $126 \bmod 18 = 0$

10: $108 \bmod 11 = 9$

11: $147 \bmod 13 = 4$

12: $184 \bmod 12 = 4$

13: $117 \bmod 18 = 9$

14: $126 \bmod 13 = 9$

15: $118 \bmod 14 = 6$

16: $108 \bmod 14 = 10$

17: $187 \bmod 20 = 7$

18: $148 \bmod 18 = 4$

19: $198 \bmod 14 = 2$

20: $129 \bmod 13 = 12$

21: $150 \bmod 11 = 7$

22: $102 \bmod 15 = 12$

23: $173 \bmod 10 = 3$

24: $134 \bmod 12 = 2$

25: $138 \bmod 17 = 2$

mod_100to200_10to20

Question 21 [25 marks]

0: 648 mod 95 = 78

1: 541 mod 71 = *44*

2: 611 mod 83 = *30*

3: 623 mod 65 = *38*

4: 699 mod 70 = *69*

5: 644 mod 65 = *59*

6: 602 mod 60 = *2*

7: 542 mod 69 = *59*

8: 875 mod 55 = *50*

9: 845 mod 82 = *25*

10: 817 mod 56 = *33*

11: 915 mod 88 = *35*

12: 785 mod 57 = *44*

13: 502 mod 72 = *70*

14: 588 mod 65 = *3*

15: 970 mod 65 = *60*

16: 873 mod 70 = *33*

17: 636 mod 76 = *28*

18: 708 mod 93 = *57*

19: 675 mod 87 = *66*

20: 802 mod 76 = *42*

21: 885 mod 93 = *48*

22: 951 mod 90 = *51*

23: 847 mod 63 = *28*

24: 636 mod 62 = *16*

25: 667 mod 77 = *51*

mod_500to1000_50to100

Question 22 [25 marks]

0: 817 mod 84 = 61

1: 542 mod 88 = *14*

2: 693 mod 90 = *63*

3: 550 mod 58 = *28*

4: 941 mod 89 = *51*

5: 592 mod 75 = *67*

6: 764 mod 91 = *36*

7: 974 mod 94 = *34*

8: 710 mod 98 = *24*

9: 758 mod 93 = *14*

10: 600 mod 69 = *48*

11: 911 mod 78 = *53*

12: 704 mod 53 = *15*

13: 544 mod 75 = *19*

14: 774 mod 61 = *42*

15: 774 mod 57 = *33*

16: 854 mod 91 = *35*

17: 806 mod 71 = *25*

18: 894 mod 55 = *14*

19: 637 mod 61 = *27*

20: 587 mod 62 = *29*

21: 506 mod 74 = *62*

22: 508 mod 88 = *68*

23: 795 mod 79 = *5*

24: 748 mod 94 = *90*

25: 613 mod 89 = *79*

mod_500to1000_50to100

Question 23 [25 marks]

0: $610 \bmod 59 = 20$

1: $716 \bmod 87 = 20$

2: $661 \bmod 88 = 45$

3: $596 \bmod 70 = 36$

4: $680 \bmod 50 = 30$

5: $906 \bmod 60 = 6$

6: $554 \bmod 61 = 5$

7: $709 \bmod 82 = 53$

8: $658 \bmod 76 = 50$

9: $894 \bmod 51 = 27$

10: $862 \bmod 82 = 42$

11: $505 \bmod 97 = 20$

12: $949 \bmod 55 = 14$

13: $692 \bmod 50 = 42$

14: $580 \bmod 67 = 44$

15: $765 \bmod 78 = 63$

16: $633 \bmod 78 = 9$

17: $869 \bmod 83 = 39$

18: $801 \bmod 89 = 0$

19: $882 \bmod 75 = 57$

20: $575 \bmod 57 = 5$

21: $650 \bmod 51 = 38$

22: $711 \bmod 53 = 22$

23: $930 \bmod 100 = 30$

24: $518 \bmod 53 = 41$

25: $990 \bmod 53 = 36$

mod_500to1000_50to100

Question 24 [25 marks]

0: $891 \bmod 78 = 33$

1: $508 \bmod 94 = 38$

2: $857 \bmod 99 = 65$

3: $867 \bmod 72 = 3$

4: $745 \bmod 61 = 13$

5: $742 \bmod 98 = 56$

6: $537 \bmod 53 = 7$

7: $593 \bmod 54 = 53$

8: $910 \bmod 50 = 10$

9: $988 \bmod 76 = 0$

10: $877 \bmod 51 = 10$

11: $869 \bmod 54 = 5$

12: $992 \bmod 76 = 4$

13: $828 \bmod 92 = 0$

14: $816 \bmod 66 = 24$

15: $984 \bmod 80 = 24$

16: $915 \bmod 69 = 18$

17: $609 \bmod 96 = 33$

18: $915 \bmod 58 = 45$

19: $714 \bmod 68 = 34$

20: $681 \bmod 90 = 51$

21: $792 \bmod 66 = 0$

22: $614 \bmod 86 = 12$

23: $743 \bmod 73 = 13$

24: $824 \bmod 99 = 32$

25: $816 \bmod 55 = 46$

mod_500to1000_50to100

Question 25 [25 marks]

0: $712 \bmod 75 = 37$

1: $512 \bmod 98 = 22$

2: $652 \bmod 62 = 32$

3: $661 \bmod 75 = 61$

4: $697 \bmod 85 = 17$

5: $774 \bmod 80 = 54$

6: $709 \bmod 91 = 72$

7: $993 \bmod 64 = 33$

8: $883 \bmod 83 = 53$

9: $756 \bmod 52 = 28$

10: $637 \bmod 68 = 25$

11: $531 \bmod 66 = 3$

12: $828 \bmod 53 = 33$

13: $642 \bmod 63 = 12$

14: $700 \bmod 90 = 70$

15: $530 \bmod 97 = 45$

16: $765 \bmod 63 = 9$

17: $738 \bmod 100 = 38$

18: $763 \bmod 98 = 77$

19: $840 \bmod 87 = 57$

20: $641 \bmod 93 = 83$

21: $865 \bmod 73 = 62$

22: $715 \bmod 97 = 36$

23: $936 \bmod 54 = 18$

24: $755 \bmod 82 = 17$

25: $928 \bmod 82 = 26$

mod_500to1000_50to100

Question 26 [25 marks]

0: $893 \bmod 79 = 24$

1: $819 \bmod 58 = 7$

2: $805 \bmod 86 = 31$

3: $794 \bmod 55 = 24$

4: $647 \bmod 88 = 31$

5: $505 \bmod 94 = 35$

6: $562 \bmod 66 = 34$

7: $628 \bmod 92 = 76$

8: $679 \bmod 50 = 29$

9: $999 \bmod 85 = 64$

10: $615 \bmod 99 = 21$

11: $978 \bmod 99 = 87$

12: $832 \bmod 98 = 48$

13: $901 \bmod 96 = 37$

14: $671 \bmod 83 = 7$

15: $997 \bmod 57 = 28$

16: $575 \bmod 78 = 29$

17: $737 \bmod 71 = 27$

18: $695 \bmod 96 = 23$

19: $904 \bmod 71 = 52$

20: $785 \bmod 54 = 29$

21: $545 \bmod 60 = 5$

22: $884 \bmod 81 = 74$

23: $867 \bmod 73 = 64$

24: $671 \bmod 60 = 11$

25: $600 \bmod 73 = 16$

mod_500to1000_50to100

Question 27 [25 marks]

0: $525 \bmod 99 = 30$

1: $648 \bmod 94 = 84$

2: $929 \bmod 84 = 5$

3: $593 \bmod 74 = 1$

4: $797 \bmod 82 = 59$

5: $564 \bmod 96 = 84$

6: $617 \bmod 64 = 41$

7: $980 \bmod 52 = 44$

8: $966 \bmod 78 = 30$

9: $561 \bmod 64 = 49$

10: $899 \bmod 71 = 47$

11: $843 \bmod 83 = 13$

12: $856 \bmod 72 = 64$

13: $850 \bmod 54 = 40$

14: $601 \bmod 97 = 19$

15: $522 \bmod 78 = 54$

16: $683 \bmod 52 = 7$

17: $806 \bmod 57 = 8$

18: $942 \bmod 53 = 41$

19: $826 \bmod 92 = 90$

20: $969 \bmod 60 = 9$

21: $872 \bmod 62 = 4$

22: $961 \bmod 90 = 61$

23: $735 \bmod 69 = 45$

24: $577 \bmod 80 = 17$

25: $832 \bmod 97 = 56$

mod_500to1000_50to100

Question 28 [25 marks]

0: $630 \bmod 72 = 54$

1: $647 \bmod 89 = 24$

2: $734 \bmod 90 = 14$

3: $953 \bmod 72 = 17$

4: $585 \bmod 79 = 32$

5: $740 \bmod 70 = 40$

6: $991 \bmod 67 = 53$

7: $825 \bmod 73 = 22$

8: $834 \bmod 73 = 31$

9: $946 \bmod 89 = 56$

10: $719 \bmod 80 = 79$

11: $571 \bmod 78 = 25$

12: $917 \bmod 93 = 80$

13: $598 \bmod 91 = 52$

14: $662 \bmod 83 = 81$

15: $642 \bmod 81 = 75$

16: $903 \bmod 80 = 23$

17: $580 \bmod 96 = 4$

18: $582 \bmod 81 = 15$

19: $778 \bmod 92 = 42$

20: $816 \bmod 54 = 6$

21: $797 \bmod 69 = 38$

22: $820 \bmod 70 = 50$

23: $823 \bmod 83 = 76$

24: $555 \bmod 50 = 5$

25: $867 \bmod 77 = 20$

mod_500to1000_50to100

Question 29 [25 marks]

0: $544 \bmod 97 = 59$

1: $721 \bmod 92 = 77$

2: $765 \bmod 80 = 45$

3: $779 \bmod 67 = 42$

4: $892 \bmod 50 = 42$

5: $935 \bmod 97 = 62$

6: $687 \bmod 57 = 3$

7: $993 \bmod 97 = 23$

8: $584 \bmod 80 = 24$

9: $626 \bmod 54 = 32$

10: $972 \bmod 79 = 24$

11: $552 \bmod 62 = 56$

12: $615 \bmod 95 = 45$

13: $559 \bmod 89 = 25$

14: $852 \bmod 90 = 42$

15: $915 \bmod 94 = 69$

16: $854 \bmod 55 = 29$

17: $609 \bmod 57 = 39$

18: $598 \bmod 60 = 58$

19: $963 \bmod 98 = 81$

20: $848 \bmod 78 = 68$

21: $687 \bmod 87 = 78$

22: $735 \bmod 70 = 35$

23: $548 \bmod 78 = 2$

24: $527 \bmod 52 = 7$

25: $691 \bmod 93 = 40$

mod_500to1000_50to100

Question 30 [25 marks]

0: $876 \bmod 64 = 44$

1: $779 \bmod 77 = 9$

2: $500 \bmod 74 = 56$

3: $591 \bmod 98 = 3$

4: $954 \bmod 94 = 14$

5: $831 \bmod 56 = 47$

6: $510 \bmod 84 = 6$

7: $622 \bmod 52 = 50$

8: $612 \bmod 86 = 10$

9: $639 \bmod 75 = 39$

10: $869 \bmod 67 = 65$

11: $560 \bmod 87 = 38$

12: $931 \bmod 74 = 43$

13: $879 \bmod 64 = 47$

14: $883 \bmod 84 = 43$

15: $762 \bmod 99 = 69$

16: $939 \bmod 69 = 42$

17: $652 \bmod 100 = 52$

18: $809 \bmod 65 = 29$

19: $906 \bmod 66 = 48$

20: $727 \bmod 73 = 70$

21: $757 \bmod 78 = 55$

22: $932 \bmod 89 = 42$

23: $551 \bmod 88 = 23$

24: $574 \bmod 77 = 35$

25: $753 \bmod 97 = 74$

mod_500to1000_50to100

Question 31 [25 marks]

0: 726 mod 93 = 75

1: 614 mod 55 = *9*

2: 753 mod 69 = *63*

3: 783 mod 96 = *15*

4: 635 mod 82 = *61*

5: 565 mod 69 = *13*

6: 555 mod 87 = *33*

7: 885 mod 55 = *5*

8: 683 mod 66 = *23*

9: 671 mod 78 = *47*

10: 519 mod 82 = *27*

11: 823 mod 86 = *49*

12: 605 mod 94 = *41*

13: 773 mod 83 = *26*

14: 840 mod 62 = *34*

15: 572 mod 72 = *68*

16: 813 mod 100 = *13*

17: 762 mod 67 = *25*

18: 706 mod 85 = *26*

19: 580 mod 77 = *41*

20: 559 mod 61 = *10*

21: 994 mod 74 = *32*

22: 878 mod 85 = *28*

23: 643 mod 94 = *79*

24: 901 mod 80 = *21*

25: 567 mod 59 = *36*

mod_500to1000_50to100

Question 32 [25 marks]

0: 802 mod 86 = 28

1: 728 mod 66 = *2*

2: 841 mod 58 = *29*

3: 866 mod 65 = *21*

4: 941 mod 78 = *5*

5: 554 mod 61 = *5*

6: 624 mod 81 = *57*

7: 742 mod 73 = *12*

8: 591 mod 98 = *3*

9: 551 mod 93 = *86*

10: 683 mod 99 = *89*

11: 869 mod 100 = *69*

12: 943 mod 79 = *74*

13: 672 mod 97 = *90*

14: 642 mod 91 = *5*

15: 563 mod 67 = *27*

16: 579 mod 93 = *21*

17: 904 mod 59 = *19*

18: 800 mod 58 = *46*

19: 589 mod 57 = *19*

20: 843 mod 83 = *13*

21: 864 mod 74 = *50*

22: 935 mod 63 = *53*

23: 838 mod 85 = *73*

24: 610 mod 97 = *28*

25: 611 mod 65 = *26*

mod_500to1000_50to100