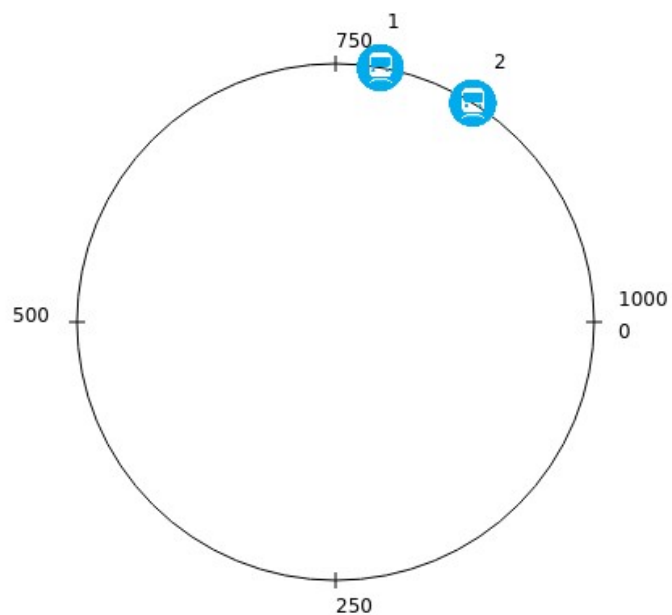
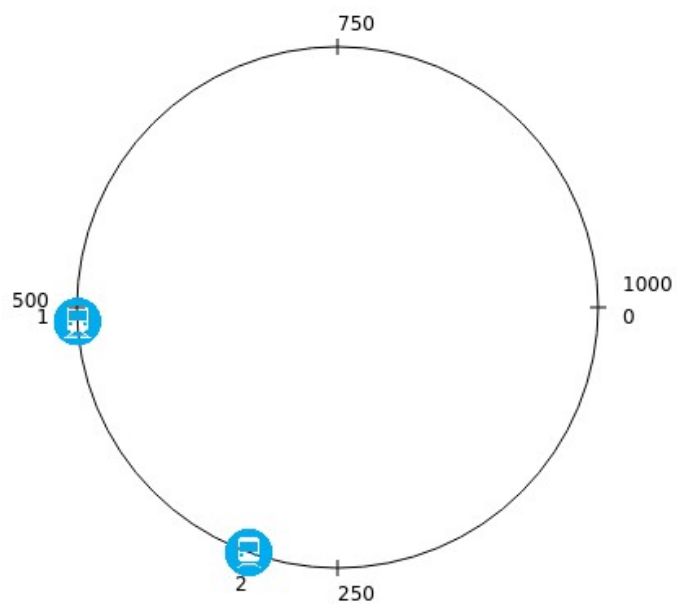


Lab 5 – 07/10  
Applying rules to the metro simulation



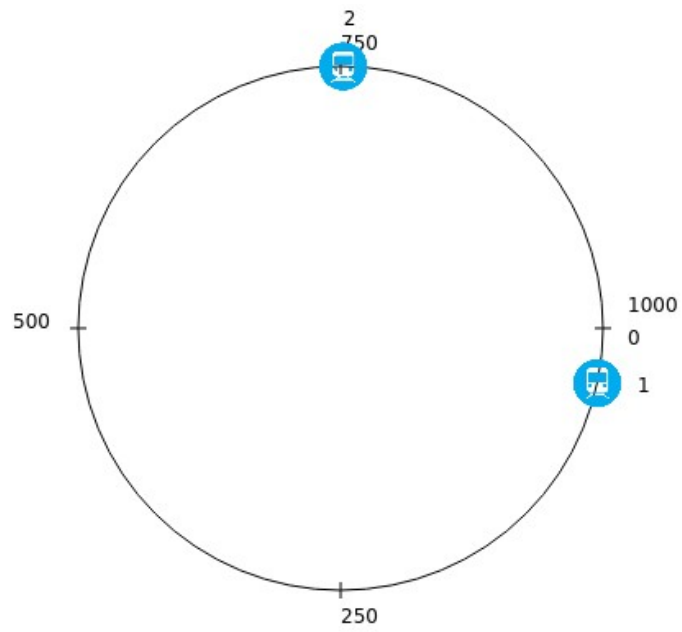
$X1 = 4$   
 $Y1 = 50$   
 $Z1 = 7.9$

$X2 = 2$   
 $Y2 = 950$   
 $Z2 = 0.9$



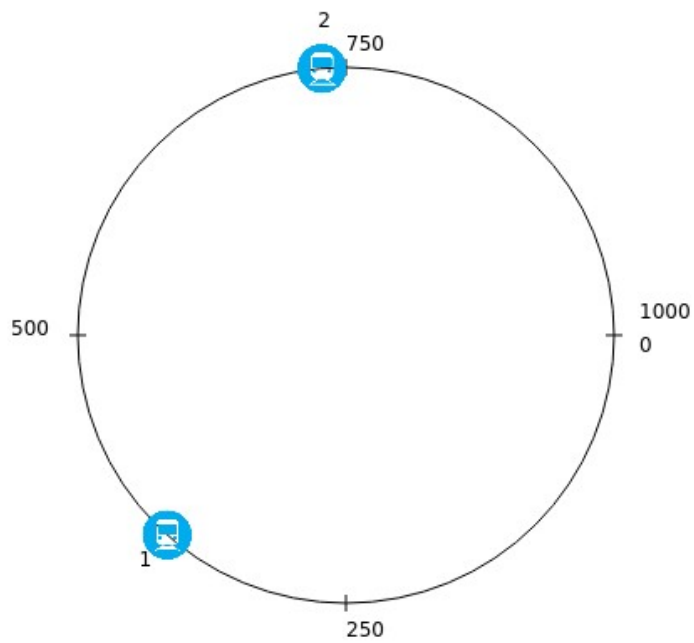
$X1 = 9$   
 $Y1 = 800$   
 $Z1 = 3.2$

$X2 = 7$   
 $Y2 = 200$   
 $Z2 = 8.3$



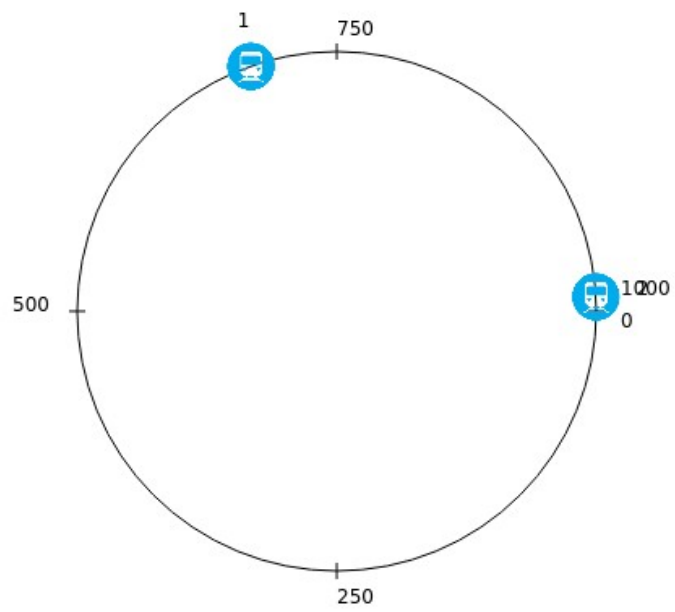
$X1 = 2$   
 $Y1 = 700$   
 $Z1 = 1.7$

$X2 = 12$   
 $Y2 = 300$   
 $Z2 = 7.3$



$X1 = 7$   
 $Y1 = 350$   
 $Z1 = 6.9$

$X2 = 9$   
 $Y2 = 650$   
 $Z2 = 4.5$



$X1 = 4$   
 $Y1 = 300$   
 $Z1 = 7.3$

$X2 = 8$   
 $Y2 = 700$   
 $Z2 = 4.5$

| X | Y    | Z    |
|---|------|------|
| 0 | 0    | 6.00 |
| 0 | 50   | 6.00 |
| 0 | 100  | 6.00 |
| 0 | 150  | 5.38 |
| 0 | 200  | 4.50 |
| 0 | 250  | 4.50 |
| 0 | 300  | 4.50 |
| 0 | 350  | 4.50 |
| 0 | 400  | 4.50 |
| 0 | 450  | 4.06 |
| 0 | 500  | 3.63 |
| 0 | 550  | 3.24 |
| 0 | 600  | 3.00 |
| 0 | 650  | 2.29 |
| 0 | 700  | 1.67 |
| 0 | 750  | 1.21 |
| 0 | 800  | 0.88 |
| 0 | 850  | 0.88 |
| 0 | 900  | 0.88 |
| 0 | 950  | 0.88 |
| 0 | 1000 | 0.88 |
| 1 | 0    | 6.00 |
| 1 | 50   | 6.00 |
| 1 | 100  | 6.00 |
| 1 | 150  | 5.38 |
| 1 | 200  | 4.50 |
| 1 | 250  | 4.50 |
| 1 | 300  | 4.50 |
| 1 | 350  | 4.50 |
| 1 | 400  | 4.50 |
| 1 | 450  | 4.06 |
| 1 | 500  | 3.63 |
| 1 | 550  | 3.24 |
| 1 | 600  | 3.00 |
| 1 | 650  | 2.29 |
| 1 | 700  | 1.67 |
| 1 | 750  | 1.21 |
| 1 | 800  | 0.88 |
| 1 | 850  | 0.88 |
| 1 | 900  | 0.88 |
| 1 | 950  | 0.88 |
| 1 | 1000 | 0.88 |
| 2 | 0    | 6.00 |
| 2 | 50   | 6.00 |
| 2 | 100  | 6.00 |
| 2 | 150  | 5.38 |
| 2 | 200  | 4.50 |
| 2 | 250  | 4.50 |
| 2 | 300  | 4.50 |

|   |      |      |
|---|------|------|
| 2 | 350  | 4.50 |
| 2 | 400  | 4.50 |
| 2 | 450  | 4.06 |
| 2 | 500  | 3.63 |
| 2 | 550  | 3.24 |
| 2 | 600  | 3.00 |
| 2 | 650  | 2.29 |
| 2 | 700  | 1.67 |
| 2 | 750  | 1.21 |
| 2 | 800  | 0.88 |
| 2 | 850  | 0.88 |
| 2 | 900  | 0.88 |
| 2 | 950  | 0.88 |
| 2 | 1000 | 0.88 |
| 3 | 0    | 7.13 |
| 3 | 50   | 7.13 |
| 3 | 100  | 7.13 |
| 3 | 150  | 6.68 |
| 3 | 200  | 6.48 |
| 3 | 250  | 6.42 |
| 3 | 300  | 6.77 |
| 3 | 350  | 6.42 |
| 3 | 400  | 4.94 |
| 3 | 450  | 4.50 |
| 3 | 500  | 4.15 |
| 3 | 550  | 3.81 |
| 3 | 600  | 3.75 |
| 3 | 650  | 3.07 |
| 3 | 700  | 2.50 |
| 3 | 750  | 2.09 |
| 3 | 800  | 1.39 |
| 3 | 850  | 1.39 |
| 3 | 900  | 1.39 |
| 3 | 950  | 1.39 |
| 3 | 1000 | 1.39 |
| 4 | 0    | 7.87 |
| 4 | 50   | 7.87 |
| 4 | 100  | 7.87 |
| 4 | 150  | 7.28 |
| 4 | 200  | 7.53 |
| 4 | 250  | 7.39 |
| 4 | 300  | 7.28 |
| 4 | 350  | 6.68 |
| 4 | 400  | 5.38 |
| 4 | 450  | 4.85 |
| 4 | 500  | 4.50 |
| 4 | 550  | 4.50 |
| 4 | 600  | 4.50 |
| 4 | 650  | 3.58 |
| 4 | 700  | 3.11 |

|   |      |      |
|---|------|------|
| 4 | 750  | 2.71 |
| 4 | 800  | 2.08 |
| 4 | 850  | 2.08 |
| 4 | 900  | 2.08 |
| 4 | 950  | 2.08 |
| 4 | 1000 | 2.08 |
| 5 | 0    | 8.32 |
| 5 | 50   | 8.32 |
| 5 | 100  | 8.32 |
| 5 | 150  | 7.79 |
| 5 | 200  | 8.19 |
| 5 | 250  | 8.03 |
| 5 | 300  | 7.63 |
| 5 | 350  | 6.88 |
| 5 | 400  | 5.76 |
| 5 | 450  | 5.19 |
| 5 | 500  | 4.94 |
| 5 | 550  | 5.19 |
| 5 | 600  | 5.25 |
| 5 | 650  | 4.07 |
| 5 | 700  | 3.78 |
| 5 | 750  | 3.52 |
| 5 | 800  | 3.05 |
| 5 | 850  | 3.05 |
| 5 | 900  | 3.05 |
| 5 | 950  | 3.05 |
| 5 | 1000 | 3.05 |
| 6 | 0    | 8.64 |
| 6 | 50   | 8.64 |
| 6 | 100  | 8.64 |
| 6 | 150  | 8.64 |
| 6 | 200  | 8.64 |
| 6 | 250  | 8.32 |
| 6 | 300  | 7.87 |
| 6 | 350  | 7.13 |
| 6 | 400  | 6.00 |
| 6 | 450  | 6.00 |
| 6 | 500  | 6.00 |
| 6 | 550  | 6.00 |
| 6 | 600  | 6.00 |
| 6 | 650  | 5.76 |
| 6 | 700  | 5.38 |
| 6 | 750  | 4.94 |
| 6 | 800  | 4.50 |
| 6 | 850  | 4.50 |
| 6 | 900  | 4.50 |
| 6 | 950  | 4.50 |
| 6 | 1000 | 4.50 |
| 7 | 0    | 8.64 |
| 7 | 50   | 8.64 |

|   |      |      |
|---|------|------|
| 7 | 100  | 8.64 |
| 7 | 150  | 8.19 |
| 7 | 200  | 8.32 |
| 7 | 250  | 8.03 |
| 7 | 300  | 7.63 |
| 7 | 350  | 6.88 |
| 7 | 400  | 5.76 |
| 7 | 450  | 5.76 |
| 7 | 500  | 5.67 |
| 7 | 550  | 5.76 |
| 7 | 600  | 5.76 |
| 7 | 650  | 5.19 |
| 7 | 700  | 4.85 |
| 7 | 750  | 4.50 |
| 7 | 800  | 4.06 |
| 7 | 850  | 4.06 |
| 7 | 900  | 4.06 |
| 7 | 950  | 4.06 |
| 7 | 1000 | 4.06 |
| 8 | 0    | 8.64 |
| 8 | 50   | 8.64 |
| 8 | 100  | 8.64 |
| 8 | 150  | 7.87 |
| 8 | 200  | 7.87 |
| 8 | 250  | 7.63 |
| 8 | 300  | 7.28 |
| 8 | 350  | 6.68 |
| 8 | 400  | 5.38 |
| 8 | 450  | 5.38 |
| 8 | 500  | 5.38 |
| 8 | 550  | 5.38 |
| 8 | 600  | 5.38 |
| 8 | 650  | 4.85 |
| 8 | 700  | 4.50 |
| 8 | 750  | 4.15 |
| 8 | 800  | 3.63 |
| 8 | 850  | 3.63 |
| 8 | 900  | 3.63 |
| 8 | 950  | 3.63 |
| 8 | 1000 | 3.63 |
| 9 | 0    | 8.64 |
| 9 | 50   | 8.64 |
| 9 | 100  | 8.64 |
| 9 | 150  | 7.87 |
| 9 | 200  | 7.13 |
| 9 | 250  | 6.88 |
| 9 | 300  | 6.68 |
| 9 | 350  | 6.42 |
| 9 | 400  | 4.94 |
| 9 | 450  | 4.94 |

|    |      |      |
|----|------|------|
| 9  | 500  | 5.08 |
| 9  | 550  | 4.94 |
| 9  | 600  | 4.94 |
| 9  | 650  | 4.50 |
| 9  | 700  | 4.15 |
| 9  | 750  | 3.81 |
| 9  | 800  | 3.24 |
| 9  | 850  | 3.24 |
| 9  | 900  | 3.24 |
| 9  | 950  | 3.24 |
| 9  | 1000 | 3.24 |
| 10 | 0    | 8.64 |
| 10 | 50   | 8.64 |
| 10 | 100  | 8.64 |
| 10 | 150  | 7.87 |
| 10 | 200  | 6.00 |
| 10 | 250  | 5.76 |
| 10 | 300  | 5.38 |
| 10 | 350  | 4.94 |
| 10 | 400  | 4.50 |
| 10 | 450  | 4.50 |
| 10 | 500  | 4.50 |
| 10 | 550  | 4.50 |
| 10 | 600  | 4.50 |
| 10 | 650  | 4.06 |
| 10 | 700  | 3.63 |
| 10 | 750  | 3.24 |
| 10 | 800  | 3.00 |
| 10 | 850  | 3.00 |
| 10 | 900  | 3.00 |
| 10 | 950  | 3.00 |
| 10 | 1000 | 3.00 |
| 11 | 0    | 8.64 |
| 11 | 50   | 8.64 |
| 11 | 100  | 8.64 |
| 11 | 150  | 7.87 |
| 11 | 200  | 7.13 |
| 11 | 250  | 6.88 |
| 11 | 300  | 6.68 |
| 11 | 350  | 6.42 |
| 11 | 400  | 4.94 |
| 11 | 450  | 4.94 |
| 11 | 500  | 5.08 |
| 11 | 550  | 4.94 |
| 11 | 600  | 4.94 |
| 11 | 650  | 4.50 |
| 11 | 700  | 4.15 |
| 11 | 750  | 3.81 |
| 11 | 800  | 3.24 |
| 11 | 850  | 3.24 |

|    |      |      |
|----|------|------|
| 11 | 900  | 3.24 |
| 11 | 950  | 3.24 |
| 11 | 1000 | 3.24 |
| 12 | 0    | 8.64 |
| 12 | 50   | 8.64 |
| 12 | 100  | 8.64 |
| 12 | 150  | 7.87 |
| 12 | 200  | 7.87 |
| 12 | 250  | 7.63 |
| 12 | 300  | 7.28 |
| 12 | 350  | 6.68 |
| 12 | 400  | 5.38 |
| 12 | 450  | 5.38 |
| 12 | 500  | 5.38 |
| 12 | 550  | 5.38 |
| 12 | 600  | 5.38 |
| 12 | 650  | 4.85 |
| 12 | 700  | 4.50 |
| 12 | 750  | 4.15 |
| 12 | 800  | 3.63 |
| 12 | 850  | 3.63 |
| 12 | 900  | 3.63 |
| 12 | 950  | 3.63 |
| 12 | 1000 | 3.63 |
| 13 | 0    | 8.64 |
| 13 | 50   | 8.64 |
| 13 | 100  | 8.64 |
| 13 | 150  | 8.19 |
| 13 | 200  | 8.32 |
| 13 | 250  | 8.03 |
| 13 | 300  | 7.63 |
| 13 | 350  | 6.88 |
| 13 | 400  | 5.76 |
| 13 | 450  | 5.76 |
| 13 | 500  | 5.67 |
| 13 | 550  | 5.76 |
| 13 | 600  | 5.76 |
| 13 | 650  | 5.19 |
| 13 | 700  | 4.85 |
| 13 | 750  | 4.50 |
| 13 | 800  | 4.06 |
| 13 | 850  | 4.06 |
| 13 | 900  | 4.06 |
| 13 | 950  | 4.06 |
| 13 | 1000 | 4.06 |
| 14 | 0    | 8.64 |
| 14 | 50   | 8.64 |
| 14 | 100  | 8.64 |
| 14 | 150  | 8.64 |
| 14 | 200  | 8.64 |

|    |      |      |
|----|------|------|
| 14 | 250  | 8.32 |
| 14 | 300  | 7.87 |
| 14 | 350  | 7.13 |
| 14 | 400  | 6.00 |
| 14 | 450  | 6.00 |
| 14 | 500  | 6.00 |
| 14 | 550  | 6.00 |
| 14 | 600  | 6.00 |
| 14 | 650  | 5.76 |
| 14 | 700  | 5.38 |
| 14 | 750  | 4.94 |
| 14 | 800  | 4.50 |
| 14 | 850  | 4.50 |
| 14 | 900  | 4.50 |
| 14 | 950  | 4.50 |
| 14 | 1000 | 4.50 |
| 15 | 0    | 8.64 |
| 15 | 50   | 8.64 |
| 15 | 100  | 8.64 |
| 15 | 150  | 8.64 |
| 15 | 200  | 8.64 |
| 15 | 250  | 8.32 |
| 15 | 300  | 7.87 |
| 15 | 350  | 7.13 |
| 15 | 400  | 7.13 |
| 15 | 450  | 7.13 |
| 15 | 500  | 7.42 |
| 15 | 550  | 7.13 |
| 15 | 600  | 6.00 |
| 15 | 650  | 5.76 |
| 15 | 700  | 5.38 |
| 15 | 750  | 4.94 |
| 15 | 800  | 4.50 |
| 15 | 850  | 4.50 |
| 15 | 900  | 4.50 |
| 15 | 950  | 4.50 |
| 15 | 1000 | 4.50 |
| 16 | 0    | 8.64 |
| 16 | 50   | 8.64 |
| 16 | 100  | 8.64 |
| 16 | 150  | 8.64 |
| 16 | 200  | 8.64 |
| 16 | 250  | 8.19 |
| 16 | 300  | 7.87 |
| 16 | 350  | 7.87 |
| 16 | 400  | 7.87 |
| 16 | 450  | 7.87 |
| 16 | 500  | 7.87 |
| 16 | 550  | 7.42 |
| 16 | 600  | 6.00 |

|    |      |      |
|----|------|------|
| 16 | 650  | 5.67 |
| 16 | 700  | 5.38 |
| 16 | 750  | 5.08 |
| 16 | 800  | 4.50 |
| 16 | 850  | 4.50 |
| 16 | 900  | 4.50 |
| 16 | 950  | 4.50 |
| 16 | 1000 | 4.50 |
| 17 | 0    | 8.64 |
| 17 | 50   | 8.64 |
| 17 | 100  | 8.64 |
| 17 | 150  | 8.64 |
| 17 | 200  | 8.64 |
| 17 | 250  | 8.32 |
| 17 | 300  | 8.19 |
| 17 | 350  | 8.32 |
| 17 | 400  | 8.32 |
| 17 | 450  | 8.32 |
| 17 | 500  | 7.87 |
| 17 | 550  | 7.13 |
| 17 | 600  | 6.00 |
| 17 | 650  | 5.76 |
| 17 | 700  | 5.38 |
| 17 | 750  | 4.94 |
| 17 | 800  | 4.50 |
| 17 | 850  | 4.50 |
| 17 | 900  | 4.50 |
| 17 | 950  | 4.50 |
| 17 | 1000 | 4.50 |
| 18 | 0    | 8.64 |
| 18 | 50   | 8.64 |
| 18 | 100  | 8.64 |
| 18 | 150  | 8.64 |
| 18 | 200  | 8.64 |
| 18 | 250  | 8.64 |
| 18 | 300  | 8.64 |
| 18 | 350  | 8.64 |
| 18 | 400  | 8.64 |
| 18 | 450  | 8.32 |
| 18 | 500  | 7.87 |
| 18 | 550  | 7.13 |
| 18 | 600  | 6.00 |
| 18 | 650  | 5.76 |
| 18 | 700  | 5.38 |
| 18 | 750  | 4.94 |
| 18 | 800  | 4.50 |
| 18 | 850  | 4.50 |
| 18 | 900  | 4.50 |
| 18 | 950  | 4.50 |
| 18 | 1000 | 4.50 |

Sheet1

|    |      |      |
|----|------|------|
| 19 | 0    | 8.64 |
| 19 | 50   | 8.64 |
| 19 | 100  | 8.64 |
| 19 | 150  | 8.64 |
| 19 | 200  | 8.64 |
| 19 | 250  | 8.64 |
| 19 | 300  | 8.64 |
| 19 | 350  | 8.64 |
| 19 | 400  | 8.64 |
| 19 | 450  | 8.32 |
| 19 | 500  | 7.87 |
| 19 | 550  | 7.13 |
| 19 | 600  | 6.00 |
| 19 | 650  | 5.76 |
| 19 | 700  | 5.38 |
| 19 | 750  | 4.94 |
| 19 | 800  | 4.50 |
| 19 | 850  | 4.50 |
| 19 | 900  | 4.50 |
| 19 | 950  | 4.50 |
| 19 | 1000 | 4.50 |
| 20 | 0    | 8.64 |
| 20 | 50   | 8.64 |
| 20 | 100  | 8.64 |
| 20 | 150  | 8.64 |
| 20 | 200  | 8.64 |
| 20 | 250  | 8.64 |
| 20 | 300  | 8.64 |
| 20 | 350  | 8.64 |
| 20 | 400  | 8.64 |
| 20 | 450  | 8.32 |
| 20 | 500  | 7.87 |
| 20 | 550  | 7.13 |
| 20 | 600  | 6.00 |
| 20 | 650  | 5.76 |
| 20 | 700  | 5.38 |
| 20 | 750  | 4.94 |
| 20 | 800  | 4.50 |
| 20 | 850  | 4.50 |
| 20 | 900  | 4.50 |
| 20 | 950  | 4.50 |
| 20 | 1000 | 4.50 |