

# 华南理工大学文件

2021、18

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- 2
- 3

2021 7 26

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7

9

车

7 9

步

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20%

4

80

步

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2 ) 4000

3 ) 2500

2.

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辩 ) 10000 /

2 ) 8000 /

3 ) 5000 /

4 ) ) 4000 / ) 2500 /

) 1500 /

5 )

6 ) 1000 /

2

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步

1000

2

步

1

1

90%

2

95%

### 3 步

90%

4

35%

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6

7

2

步

20%

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2.

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60

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6.

75

步

7.

步

1.

辯

80

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1

車

2

90

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8

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10%

2

10%

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3.

1

25%

2

2.

步

20%

步

2%

步

6%

步

12%

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4.

40%

)

1.

步

4%

)

20%

30%

2.

步

12%

)

40%

50%

3.

步

24%

)

66%

76%

4. )

10

1

|     |     |     |
|-----|-----|-----|
|     | S   | D   |
| Z   | T   | )   |
| 20% | 65% | 15% |

S )

$$S = 0.20D + 0.65Z + 0.15T$$

D )

$$D = D1 + D2 + D3$$

) D1

D2

D3

D1

65

10% 60% 30% )

|  |   |         |         |     |
|--|---|---------|---------|-----|
|  |   |         |         |     |
|  |   | 6.0 5.4 | 5.3 3.6 | 3.6 |
|  |   | 7.0 6.3 | 6.2 4.2 | 4.2 |
|  |   | 6.0 5.4 | 5.3 3.6 | 3.6 |
|  |   | 5.0 4.5 | 4.4 3.0 | 3.0 |
|  | 先 | 7.0 6.3 | 6.2 4.2 | 4.2 |
|  |   | 6.0 5.4 | 5.3 3.6 | 3.6 |
|  |   | 7.0 6.3 | 6.2 4.2 | 4.2 |
|  |   | 5.0 4.5 | 4.4 3.0 | 3.0 |
|  |   | 6.0 5.4 | 5.3 3.6 | 3.6 |
|  |   | 5.0 4.5 | 4.4 3.0 | 3.0 |
|  |   | 5.0 4.5 | 4.4 3.0 | 3.0 |

D2

35

1.

1

|   |    |
|---|----|
|   |    |
| ; | 15 |
| ; | 12 |
|   | 7  |
|   | 4  |
|   | 4  |
|   | 3  |
|   | 2  |

2

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|--|----|----|---|
|  |    |    |   |
|  |    |    |   |
|  | 12 | 10 | 8 |
|  | 9  | 7  | 6 |
|  | 6  | 5  | 4 |
|  | 5  | 4  | 3 |
|  | 4  |    | 3 |
|  | 3  |    | 2 |

:

2. 步

)

1

|  | 1 |     | 2   |     | 3 4 |     |
|--|---|-----|-----|-----|-----|-----|
|  |   |     |     |     |     |     |
|  | 8 | 6   | 5   | 3   | 3   | 2   |
|  | 6 | 3   | 3   | 2   | 2   | 1.5 |
|  | 3 | 2   | 2   | 1.5 | 1.5 | 1   |
|  | 2 | 1.5 | 1.5 | 1   | 1   | 0.5 |

2

|  | 1 | 2   | 3 4 |
|--|---|-----|-----|
|  | 8 | 6   | 3   |
|  | 6 | 3   | 2   |
|  | 3 | 2   | 1.5 |
|  | 2 | 1.5 | 1   |

3.

1      步                      步                      2

)

D3

1.

|  |  |    |
|--|--|----|
|  |  |    |
|  |  | 2  |
|  |  | 4  |
|  |  | 8  |
|  |  | 20 |
|  |  | 40 |
|  |  | 50 |
|  |  | 60 |

2.

|  |    |   |
|--|----|---|
|  |    |   |
|  |    |   |
|  | 10 | 8 |
|  | 8  | 6 |
|  | 5  | 3 |

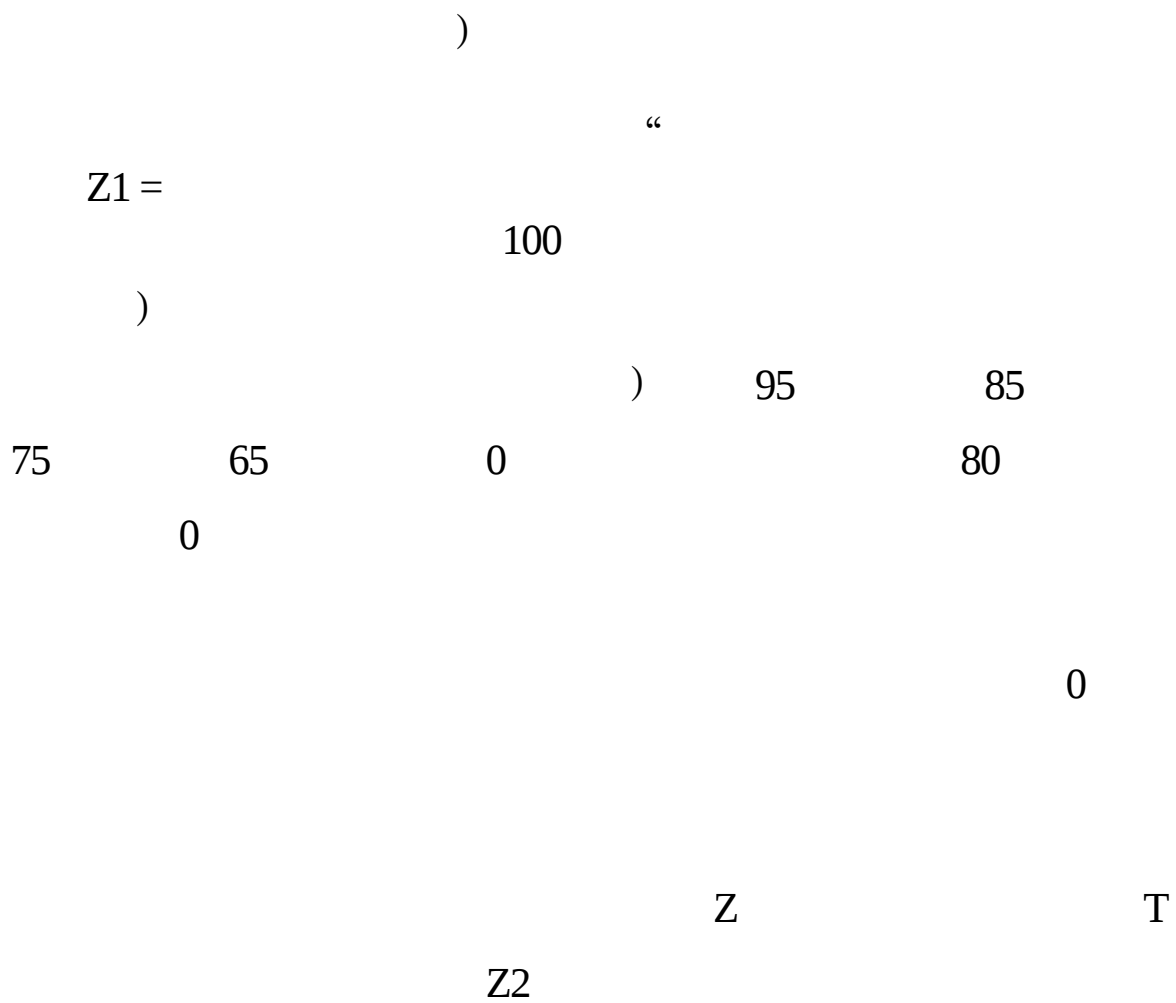
)

)

$$Z = 2Z_1 + Z_2$$

) Z1

Z2



1.

1

|  | 1 | 2 | 3 6 |
|--|---|---|-----|
|  | 8 | 6 | 5   |
|  | 6 | 5 | 3   |
|  | 5 | 3 | 2   |
|  | 3 | 2 | 1   |
|  | 2 | 1 | 0.5 |

2

|  |       |     | ;   |     |
|--|-------|-----|-----|-----|
|  | 1     | 8   | 6   | 5   |
|  | 2     | 6   | 5   | 4   |
|  | 3 4   | 5   | 4   | 3   |
|  | 1     | 6   | 4.5 | 3.5 |
|  | 2     | 5   | 3.5 | 2.5 |
|  | 3 4   | 3   | 2.5 | 1.5 |
|  | 1     | 5   | 3.5 | 2   |
|  | 2     | 3   | 2   | 1.5 |
|  | 3 4   | 2   | 1.5 | 1   |
|  | 1     | 3   | 2   | 1.5 |
|  | 2     | 2   | 1.5 | 1   |
|  | 3 4   | 1   | 0.5 |     |
|  | 1     | 1.5 | 1   |     |
|  | 2 3 4 | 0.5 |     |     |

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步

3

2.

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|  |       |     |     |
|--|-------|-----|-----|
|  |       |     |     |
|  | 8-10  | 5-7 | 3-4 |
|  | 3-8   | 2-4 | 1-2 |
|  | 0.5-3 | 0-2 | 0-1 |

)

T

)

T = T1 + T2 + T3

) T1

T2

T3

T1

T1 = 2 × 0.55

T1

0

T2

10%

50%

40%

1.

12

18

2.

51

34

# T3

15

1.

1

|  |    |
|--|----|
|  |    |
|  | 10 |
|  | 9  |
|  | 7  |
|  | 5  |
|  | 4  |

2

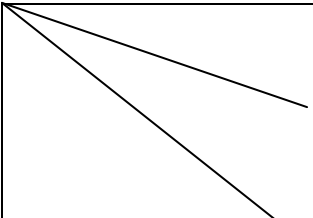
|  |    |   |
|--|----|---|
|  |    |   |
|  |    |   |
|  | 10 | 8 |

|  |   |   |
|--|---|---|
|  | 9 | 7 |
|  | 7 | 5 |
|  | 5 | 4 |
|  | 4 | 3 |

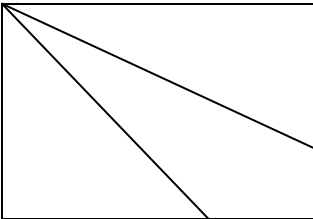
2. 步

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1

|  | 1 |     | 2   |     | 3 4 |     |
|-----------------------------------------------------------------------------------|---|-----|-----|-----|-----|-----|
|                                                                                   |   |     |     |     |     |     |
|                                                                                   | 6 | 4   | 5   | 3   | 3   | 2   |
|                                                                                   | 5 | 3   | 3   | 2   | 2   | 1.5 |
|                                                                                   | 3 | 2   | 2   | 1.5 | 1.5 | 1   |
|                                                                                   | 2 | 1.5 | 1.5 | 1   | 1   | 0.5 |

2

|  | 1 3 | 4 6 | 7 8<br>; |
|-------------------------------------------------------------------------------------|-----|-----|----------|
|                                                                                     |     |     |          |
|                                                                                     | 6   | 5   | 3        |
|                                                                                     | 5   | 3   | 2        |
|                                                                                     | 3   | 2   | 1        |
|                                                                                     | 2   | 1   | 0.5      |

3.

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1

|  |     |
|--|-----|
|  |     |
|  | 5.0 |
|  | 2.5 |
|  | 2.0 |
|  | 1.0 |

2

|  |     |     |
|--|-----|-----|
|  |     |     |
|  |     |     |
|  | 4.0 | 3.0 |
|  | 3.0 | 2.0 |
|  | 2.0 | 1.5 |
|  | 1.5 | 1.0 |

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步

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步 )

1.

1

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|--|----|
|  |    |
|  | 21 |
|  | 18 |
|  | 15 |
|  | 12 |
|  | 9  |

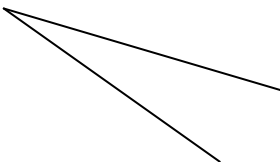
2

|  |    |    |
|--|----|----|
|  |    |    |
|  |    |    |
|  | 20 | 18 |
|  | 17 | 15 |
|  | 14 | 12 |
|  | 11 | 9  |
|  | 8  | 7  |

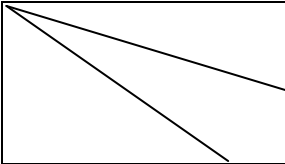
2. 步

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|                                                                                     |   |     |     |     |     |     |
|-------------------------------------------------------------------------------------|---|-----|-----|-----|-----|-----|
|  | 1 |     | 2   |     | 3 4 |     |
|                                                                                     |   |     |     |     |     |     |
|                                                                                     | 6 | 4   | 5   | 3   | 3   | 2   |
|                                                                                     | 5 | 3   | 3   | 2   | 2   | 1.5 |
|                                                                                     | 3 | 2   | 2   | 1.5 | 1.5 | 1   |
|                                                                                     | 2 | 1.5 | 1.5 | 1   | 1   | 0.5 |

2

|                                                                                   |     |     |          |
|-----------------------------------------------------------------------------------|-----|-----|----------|
|  | 1 3 | 4 6 | 7 8<br>; |
|                                                                                   | 6   | 5   | 3        |
|                                                                                   | 5   | 3   | 2        |
|                                                                                   | 3   | 2   | 1.5      |
|                                                                                   | 2   | 1.5 | 1        |

3.

1

|  |   |
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|  |   |
|  | 6 |
|  | 5 |
|  | 3 |
|  | 1 |

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|  |   |     |
|  |   |     |
|  | 5 | 4   |
|  | 4 | 3   |
|  | 3 | 1   |
|  | 1 | 0.5 |

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步



|   |   |    |   |    |    |
|---|---|----|---|----|----|
| 3 |   |    |   |    |    |
| 1 |   |    |   |    |    |
|   | 8 | 10 |   |    |    |
| 2 |   |    |   | 10 |    |
| 3 |   |    |   |    | 10 |
|   | 3 |    | 3 |    |    |

|   |   |   |   |
|---|---|---|---|
| 1 | 步 |   |   |
| 1 |   | 步 | 参 |

|     |     |    |     |     |     |     |     |
|-----|-----|----|-----|-----|-----|-----|-----|
| 3   |     |    |     |     |     |     |     |
| 15  | 10  |    |     |     |     |     |     |
| 4   |     |    |     |     |     |     |     |
|     |     | 20 | 15  |     |     |     |     |
| 5   |     |    |     |     |     |     |     |
|     | 2   | 4  |     |     |     |     |     |
| 1   |     |    |     |     | 30  | 50  |     |
| 2   |     |    |     |     | 2   |     |     |
| 3   |     |    |     |     |     | 30  |     |
| 4   |     |    |     | 98% | 98% |     | 95% |
| 95% | 98% |    | 98% | 90% | 90% | 95% | 95% |
|     | 50  | 35 | 25  |     |     |     |     |

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|   |   |   |     |   |
|---|---|---|-----|---|
| 1 | 步 |   |     |   |
|   |   | 5 |     |   |
| 2 | 步 |   |     |   |
|   |   | 5 | 4   | 3 |
| 步 |   | 1 | 1.5 |   |

|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
| 1.  | 步   |     |     |     | 80% |
| 80% | 90% | 90% | 90% | 90% |     |
| 10  | 15  |     |     |     |     |
| 2   | 步   |     |     | 步   | 50% |
|     | 50% | 20% | 50% | 8   | 5   |
| 3   |     |     |     |     |     |
|     | 5   | 3   |     |     |     |
| 4   | 步   |     |     | 70% | 70% |
| 50% | 50% | 50% | 50% | 10  | 15  |
| 1   | 步   |     |     |     | 6   |
| 2   | 步   |     |     |     |     |
|     | 1   | 4   | 20  | 15  | 10  |
| 3   |     |     |     | 1   | 6   |
|     | 4   | 3   | 2.5 | 2   | 1.5 |
|     | 步   |     |     | 1   | 1.5 |
| 4   | 步   |     |     | 1   | 4   |
|     |     |     | 4   | 3   | 2   |
|     | 步   |     | 1   | 1.5 |     |
| 5   |     |     | 95% | 95% | 90% |
| 90% |     | 5   | 10  |     | 90% |

)

3

5

4

45

8

55

15

70

35

|        |            |
|--------|------------|
|        |            |
| ACM    | ACM ICPC   |
|        | MCM/ICM    |
|        |            |
|        |            |
| Jessup |            |
| +      |            |
|        |            |
|        |            |
|        |            |
| IBM    |            |
|        |            |
|        | RoboMaster |
|        |            |
|        |            |
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