

## Zaregulování soustavy

| úsek | přenášený výkon | hmotnostní průtok | délka úseku | DN     | w       | R       | $\Sigma\xi$ | R*I      | Z        | R*I+z    |
|------|-----------------|-------------------|-------------|--------|---------|---------|-------------|----------|----------|----------|
| 1    | 21407           | 1227,33           | 1,95        |        |         |         | 0           | 0        | 0        | 0        |
|      | 21407           | 1227,33           | 1,95        |        |         |         | 0           | 0        | 0        | 0        |
| 2    | 12005           | 688,29            | 4,8         | 32x3   | 0,5502  | 139,1   | 0,2         | 667,68   | 30,272   | 697,952  |
|      | 12005           | 688,29            | 4,80        | 32x3   | 0,55    | 139,10  | 1           | 667,68   | 151,36   | 819,04   |
| 4    | 12005           | 688,29            | 6,2         | 32x3   | 0,55872 | 143,36  | 0,2         | 888,832  | 31,2168  | 920,0488 |
|      | 12005           | 688,29            | 6,2         | 32x3   | 0,55872 | 143,36  | 1           | 888,832  | 156,084  | 1044,916 |
| 5    | 2720            | 155,95            | 0,1         | 18x2   | 0,424   | 195,6   | 3           | 19,56    | 269,664  | 289,224  |
|      | 2720            | 155,95            | 0,1         | 18x2   | 0,424   | 195,6   | 8           | 19,56    | 719,104  | 738,664  |
| 6    | 2353            | 134,91            | 0,5         | 18x2   | 0,3706  | 152,36  | 3           | 76,18    | 206,0165 | 282,1965 |
|      | 2353            | 134,91            | 0,50        | 18x2   | 0,37    | 152,36  | 8           | 76,18    | 549,3774 | 625,5574 |
| 7    | 367             | 21,04             | 0,92        | 14x2   | 0,1101  | 31,38   | 2,5         | 28,8696  | 15,15251 | 44,02211 |
|      | 367,00          | 21,04             | 0,92        | 14x2   | 0,11    | 31,38   | 0           | 28,8696  | 0        | 28,8696  |
| 8    | 942             | 54,01             | 5,76        | 14x2   | 0,2926  | 154,18  | 6           | 888,0768 | 256,8443 | 1144,921 |
|      | 942             | 54,01             | 5,76        | 14x2   | 0,29    | 154,18  | 2           | 888,0768 | 85,61476 | 973,6916 |
| 9    | 1411            | 80,90             | 7,98        | 16x2   | 0,3022  | 130,76  | 6           | 1043,465 | 273,9745 | 1317,439 |
|      | 1411            | 80,90             | 7,98        | 16x2   | 0,3022  | 130,76  | 2           | 1043,465 | 91,32484 | 1134,79  |
| 10   | 9285            | 532,34            | 3,95        | 25x2,5 | 0,72984 | 320,884 | 4,7         | 1267,492 | 1251,766 | 2519,258 |
|      | 9285            | 532,34            | 3,95        | 25x2,5 | 0,72984 | 320,884 | 11          | 1267,492 | 2929,665 | 4197,157 |
| 12   | 1095            | 62,78             | 5,3         | 16x2   | 0,2532  | 84,35   | 6           | 447,055  | 192,3307 | 639,3857 |
|      | 1095            | 62,78             | 5,3         | 16x2   | 0,2532  | 84,35   | 2           | 447,055  | 64,11024 | 511,1652 |
| 11   | 2000            | 114,67            | 2,1         | 16x2   | 0,2385  | 238     | 0,2         | 499,8    | 5,688225 | 505,4882 |
|      | 2000            | 114,67            | 2,1         | 16x2   | 0,2385  | 238     | 1           | 499,8    | 28,44113 | 528,2411 |
| 13   | 432             | 24,77             | 1,86        | 14x2   | 0,1296  | 41,12   | 4,5         | 76,4832  | 37,79136 | 114,2746 |
|      | 432             | 24,77             | 1,86        | 14x2   | 0,1296  | 41,12   | 2           | 76,4832  | 16,79616 | 93,27936 |
| 14   | 1568            | 89,90             | 6,71        | 16x2   | 0,3136  | 156,56  | 2,2         | 1050,518 | 108,1795 | 1158,697 |
|      | 1568            | 89,90             | 6,71        | 16x2   | 0,3136  | 156,56  | 3           | 1050,518 | 147,5174 | 1198,035 |
| 15   | 784             | 44,95             | 3,9         | 14x2   | 0,2452  | 112,32  | 1,8         | 438,048  | 54,11074 | 492,1587 |
|      | 784             | 44,95             | 3,9         | 14x2   | 0,2452  | 112,32  | 0           | 438,048  | 0        | 438,048  |

|            | úsek | přenášený výkon | hmotnostní průtok | délka úseku | DN     | w       | R       | $\Sigma\xi$ | R*I      | Z        | R*I+z    |
|------------|------|-----------------|-------------------|-------------|--------|---------|---------|-------------|----------|----------|----------|
| Byt A 3.NP | 21   | 6190            | 354,89            | 3,45        | 25x2,5 | 0,48656 | 157,608 | 3,2         | 543,7476 | 378,785  | 922,5326 |
|            |      | 6190            | 354,89            | 3,45        | 25x2,5 | 0,48656 | 157,608 | 11          | 543,7476 | 1302,073 | 1845,821 |
|            | 23   | 1095            | 62,78             | 5,3         | 16x2   | 0,2385  | 84,35   | 6           | 447,055  | 170,6468 | 617,7018 |
|            |      | 1095            | 62,78             | 5,3         | 16x2   | 0,2385  | 84,35   | 2           | 447,055  | 56,88225 | 503,9373 |
|            | 22   | 2000            | 114,67            | 2,1         | 16x2   | 0,43    | 238     | 0,2         | 499,8    | 18,49    | 518,29   |
|            |      | 2000            | 114,67            | 2,1         | 16x2   | 0,43    | 238     | 1           | 499,8    | 92,45    | 592,25   |
|            | 24   | 432             | 24,77             | 1,86        | 14x2   | 0,1296  | 41,12   | 4,5         | 76,4832  | 37,79136 | 114,2746 |
|            |      | 432             | 24,77             | 1,86        | 14x2   | 0,1296  | 41,12   | 2           | 76,4832  | 16,79616 | 93,27936 |
|            | 25   | 1568            | 89,90             | 6,71        | 16x2   | 0,3136  | 156,56  | 2,2         | 1050,518 | 108,1795 | 1158,697 |
|            |      | 1568            | 89,90             | 6,71        | 16x2   | 0,3136  | 156,56  | 3           | 1050,518 | 147,5174 | 1198,035 |
|            | 26   | 784             | 44,95             | 3,9         | 14x2   | 0,2452  | 112,32  | 1,8         | 438,048  | 54,11074 | 492,1587 |
|            |      | 784             | 44,95             | 3,9         | 14x2   | 0,2452  | 112,32  | 0           | 438,048  | 0        | 438,048  |
| Byt A 4.NP | 31   | 3095            | 177,45            | 3,45        | 18x2   | 0,4966  | 255,24  | 5           | 880,578  | 616,5289 | 1497,107 |
|            |      | 3095            | 177,45            | 3,45        | 18x2   | 0,4966  | 255,24  | 10          | 880,578  | 1233,058 | 2113,636 |
|            | 33   | 1095            | 62,78             | 5,3         | 16x2   | 0,2385  | 84,35   | 6           | 447,055  | 170,6468 | 617,7018 |
|            |      | 1095            | 62,78             | 5,3         | 16x2   | 0,2385  | 84,35   | 2           | 447,055  | 56,88225 | 503,9373 |
|            | 32   | 2000            | 114,67            | 2,1         | 16x2   | 0,43    | 238     | 0,2         | 499,8    | 18,49    | 518,29   |
|            |      | 2000            | 114,67            | 2,1         | 16x2   | 0,43    | 238     | 1           | 499,8    | 92,45    | 592,25   |
|            | 34   | 432             | 24,77             | 1,86        | 14x2   | 0,1296  | 41,12   | 4,5         | 76,4832  | 37,79136 | 114,2746 |
|            |      | 432             | 24,77             | 1,86        | 14x2   | 0,1296  | 41,12   | 2           | 76,4832  | 16,79616 | 93,27936 |
|            | 35   | 1568            | 89,90             | 6,71        | 16x2   | 0,3136  | 156,56  | 2,2         | 1050,518 | 108,1795 | 1158,697 |
|            |      | 1568            | 89,90             | 6,71        | 16x2   | 0,3136  | 156,56  | 3           | 1050,518 | 147,5174 | 1198,035 |
|            | 36   | 784             | 44,95             | 3,9         | 14x2   | 0,2452  | 112,32  | 1,8         | 438,048  | 54,11074 | 492,1587 |
|            |      | 784             | 44,95             | 3,9         | 14x2   | 0,2452  | 112,32  | 0           | 438,048  | 0        | 438,048  |
| Byt B 2.NP | 16   | 747             | 42,83             | 1,3         | 14x2   | 0,2341  | 103,81  | 0,2         | 134,953  | 5,480281 | 140,4333 |
|            |      | 747             | 42,83             | 1,3         | 14x2   | 0,2341  | 103,81  | 1           | 134,953  | 27,40141 | 162,3544 |
|            | 17   | 315             | 18,06             | 3,2         | 14x2   | 0,0945  | 24,1    | 1,8         | 77,12    | 8,037225 | 85,15723 |
|            |      | 315             | 18,06             | 3,2         | 14x2   | 0,0945  | 24,1    | 0           | 77,12    | 0        | 77,12    |

| úsek             | přenášený výkon | hmotnostní průtok | délka úseku | DN     | w       | R       | $\Sigma\xi$ | R*I      | Z        | R*I+z    |
|------------------|-----------------|-------------------|-------------|--------|---------|---------|-------------|----------|----------|----------|
| 18               | 784             | 44,95             | 9,02        | 14x2   | 0,0252  | 112,32  | 3,8         | 1013,126 | 1,206576 | 1014,333 |
|                  | 784             | 44,95             | 9,02        | 14x2   | 0,0252  | 112,32  | 2           | 1013,126 | 0,63504  | 1013,761 |
| 20               | 583             | 33,43             | 1,5         | 14x2   | 0,1832  | 67,77   | 4           | 101,655  | 67,12448 | 168,7795 |
|                  | 583             | 33,43             | 1,5         | 14x2   | 0,1832  | 67,77   | 0           | 101,655  | 0        | 101,655  |
| 19               | 1603            | 91,91             | 6,4         | 16x2   | 0,1512  | 162,54  | 2,2         | 1040,256 | 25,14758 | 1065,404 |
|                  | 1603            | 91,91             | 6,4         | 16x2   | 0,1512  | 162,54  | 1           | 1040,256 | 11,43072 | 1051,687 |
| 21               | 2387            | 136,85            | 0,5         | 18x2   | 0,3774  | 156,44  | 3           | 78,22    | 213,6461 | 291,8661 |
|                  | 2387            | 136,85            | 0,5         | 18x2   | 0,3774  | 156,44  | 8           | 78,22    | 569,723  | 647,943  |
| 22               | 9402            | 539,05            | 3,45        | 25x2,5 | 0,72216 | 315,316 | 5           | 1087,84  | 1303,788 | 2391,628 |
|                  | 9402            | 539,048           | 3,45        | 25x2,5 | 0,72216 | 315,316 | 10          | 1087,84  | 2607,575 | 3695,416 |
| Byt B 3.NP<br>26 | 747             | 42,83             | 1,3         | 14x2   | 0,2341  | 103,81  | 0,2         | 134,953  | 5,480281 | 140,4333 |
|                  | 747             | 42,83             | 1,3         | 14x2   | 0,2341  | 103,81  | 1           | 134,953  | 27,40141 | 162,3544 |
| 27               | 315             | 18,06             | 3,2         | 14x2   | 0,0945  | 24,1    | 1,8         | 77,12    | 8,037225 | 85,15723 |
|                  | 315             | 18,06             | 3,2         | 14x2   | 0,0945  | 24,1    | 0           | 77,12    | 0        | 77,12    |
| 28               | 784             | 44,95             | 9,02        | 14x2   | 0,0252  | 112,32  | 3,8         | 1013,126 | 1,206576 | 1014,333 |
|                  | 784             | 44,95             | 9,02        | 14x2   | 0,0252  | 112,32  | 2           | 1013,126 | 0,63504  | 1013,761 |
| 30               | 583             | 33,43             | 1,5         | 14x2   | 0,1832  | 67,77   | 4           | 101,655  | 67,12448 | 168,7795 |
|                  | 583             | 33,43             | 1,5         | 14x2   | 0,1832  | 67,77   | 0           | 101,655  | 0        | 101,655  |
| 29               | 1603            | 91,91             | 6,4         | 16x2   | 0,1512  | 162,54  | 2,2         | 1040,256 | 25,14758 | 1065,404 |
|                  | 1603            | 91,91             | 6,4         | 16x2   | 0,1512  | 162,54  | 1           | 1040,256 | 11,43072 | 1051,687 |
| 31               | 2387            | 136,85            | 0,5         | 18x2   | 0,3774  | 156,44  | 3           | 78,22    | 213,6461 | 291,8661 |
|                  | 2387            | 136,85            | 0,5         | 18x2   | 0,3774  | 156,44  | 8           | 78,22    | 569,723  | 647,943  |
| 32               | 6268            | 359,37            | 3,45        | 25x2,5 | 0,48144 | 154,792 | 5           | 534,0324 | 579,4612 | 1113,494 |
|                  | 6268            | 359,365333        | 3,45        | 25x2,5 | 0,48144 | 154,792 | 10          | 534,0324 | 1158,922 | 1692,955 |
| Byt B 4.NP<br>37 | 747             | 42,83             | 1,3         | 14x2   | 0,2341  | 103,81  | 0,2         | 134,953  | 5,480281 | 140,4333 |
|                  | 747             | 42,83             | 1,3         | 14x2   | 0,2341  | 103,81  | 1           | 134,953  | 27,40141 | 162,3544 |
| 38               | 315             | 18,06             | 3,2         | 14x2   | 0,0945  | 24,1    | 1,8         | 77,12    | 8,037225 | 85,15723 |
|                  | 315             | 18,06             | 3,2         | 14x2   | 0,0945  | 24,1    | 0           | 77,12    | 0        | 77,12    |
| 39               | 784             | 44,95             | 9,02        | 14x2   | 0,0252  | 112,32  | 3,8         | 1013,126 | 1,206576 | 1014,333 |

| úsek | přenášený výkon | hmotnostní průtok | délka úseku | DN   | w      | R      | $\Sigma\xi$ | R*I      | Z        | R*I+z    |
|------|-----------------|-------------------|-------------|------|--------|--------|-------------|----------|----------|----------|
|      | 784             | 44,95             | 9,02        | 14x2 | 0,0252 | 112,32 | 2           | 1013,126 | 0,63504  | 1013,761 |
| 41   | 583             | 33,43             | 1,5         | 14x2 | 0,1832 | 67,77  | 4           | 101,655  | 67,12448 | 168,7795 |
|      | 583             | 33,43             | 1,5         | 14x2 | 0,1832 | 67,77  | 0           | 101,655  | 0        | 101,655  |
| 40   | 1603            | 91,91             | 6,4         | 16x2 | 0,1512 | 162,54 | 2,2         | 1040,256 | 25,14758 | 1065,404 |
|      | 1603            | 91,91             | 6,4         | 16x2 | 0,1512 | 162,54 | 1           | 1040,256 | 11,43072 | 1051,687 |
| 42   | 2387            | 136,85            | 0,5         | 18x2 | 0,3774 | 156,44 | 3           | 78,22    | 213,6461 | 291,8661 |
|      | 2387            | 136,85            | 0,5         | 18x2 | 0,3774 | 156,44 | 8           | 78,22    | 569,723  | 647,943  |
| 43   | 3134            | 179,68            | 3,45        | 18x2 | 0,4934 | 250,76 | 5           | 865,122  | 608,6089 | 1473,731 |
|      | 3134            | 179,682667        | 3,45        | 18x2 | 0,4934 | 250,76 | 10          | 865,122  | 1217,218 | 2082,34  |

Druh vřazeného odporu

| úsek | Kotel | OT  | kolena | T-kus + křížení pravoúhlé |   |   |     | T-kus pravoúhlý |   | ξ   |
|------|-------|-----|--------|---------------------------|---|---|-----|-----------------|---|-----|
|      |       |     |        | 1,5                       | 2 | 1 | 0,2 | 8               | 3 |     |
|      |       |     |        |                           |   |   |     |                 |   | 0   |
| 3    |       |     |        |                           |   |   | 0,2 |                 |   | 0,2 |
|      |       |     |        |                           |   | 1 |     |                 |   | 1   |
| 4    |       |     |        |                           |   |   | 0,2 |                 |   | 0,2 |
|      |       |     |        |                           |   | 1 |     |                 |   | 1   |
| 5    |       |     |        |                           |   |   |     |                 | 3 | 3   |
|      |       |     |        |                           |   |   |     | 8               |   | 8   |
| 6    |       |     |        |                           |   |   |     |                 | 3 | 3   |
|      |       |     |        |                           |   |   |     | 8               |   | 8   |
| 7    |       | 2,5 |        |                           |   |   |     |                 |   | 2,5 |
|      |       |     |        |                           |   |   |     |                 |   | 0   |
| 8    |       | 4   | 2      |                           |   |   |     |                 |   | 6   |
|      |       |     | 2      |                           |   |   |     |                 |   | 2   |
| 9    |       | 4   | 2      |                           |   |   |     |                 |   | 6   |
|      |       |     | 2      |                           |   |   |     |                 |   | 2   |
|      |       |     |        |                           |   |   |     |                 |   | 0   |
| 10   |       |     | 1,5    |                           |   |   | 0,2 |                 | 3 | 4,7 |
|      |       |     | 2      |                           |   | 1 |     | 8               |   | 11  |
| 12   |       | 4   | 2      |                           |   |   |     |                 |   | 6   |
|      |       |     | 2      |                           |   |   |     |                 |   | 2   |
| 11   |       |     |        |                           |   |   | 0,2 |                 |   | 0,2 |
|      |       |     |        |                           |   | 1 |     |                 |   | 1   |
| 13   |       | 2,5 | 2      |                           |   |   |     |                 |   | 4,5 |
|      |       |     | 2      |                           |   |   |     |                 |   | 2   |
| 14   |       |     | 2      |                           |   |   | 0,2 |                 |   | 2,2 |
|      |       |     | 2      |                           |   | 1 |     |                 |   | 3   |
| 15   |       | 1,8 |        |                           |   |   |     |                 |   | 1,8 |
|      |       |     |        |                           |   |   |     |                 |   |     |

| úsek | Kotel | OT  | kolena | T-kus + křížení pravouhlé |   |   |     | T-kus pravouhlý |   | ξ   |
|------|-------|-----|--------|---------------------------|---|---|-----|-----------------|---|-----|
|      |       |     |        | 1,5                       | 2 | 1 | 0,2 | 8               | 3 |     |
| 21   |       |     |        |                           |   |   | 0,2 |                 | 3 | 3,2 |
|      |       |     | 2      |                           |   | 1 |     | 8               |   | 11  |
| 23   |       | 4   | 2      |                           |   |   |     |                 |   | 6   |
|      |       |     | 2      |                           |   |   |     |                 |   | 2   |
| 22   |       |     |        |                           |   |   | 0,2 |                 |   | 0,2 |
|      |       |     |        |                           |   | 1 |     |                 |   | 1   |
| 24   |       | 2,5 | 2      |                           |   |   |     |                 |   | 4,5 |
|      |       |     | 2      |                           |   |   |     |                 |   | 2   |
| 25   |       |     | 2      |                           |   |   | 0,2 |                 |   | 2,2 |
|      |       |     | 2      |                           |   | 1 |     |                 |   | 3   |
| 26   |       | 1,8 |        |                           |   |   |     |                 |   | 1,8 |
|      |       |     |        |                           |   |   |     |                 |   |     |
| 31   |       |     | 2      |                           |   |   |     |                 | 3 | 5   |
|      |       |     | 2      |                           |   |   |     | 8               |   | 10  |
| 33   |       | 4   | 2      |                           |   |   |     |                 |   | 6   |
|      |       |     | 2      |                           |   |   |     |                 |   | 2   |
| 32   |       |     |        |                           |   |   | 0,2 |                 |   | 0,2 |
|      |       |     |        |                           |   | 1 |     |                 |   | 1   |
| 34   |       | 2,5 | 2      |                           |   |   |     |                 |   | 4,5 |
|      |       |     | 2      |                           |   |   |     |                 |   | 2   |
| 35   |       |     | 2      |                           |   |   | 0,2 |                 |   | 2,2 |
|      |       |     | 2      |                           |   | 1 |     |                 |   | 3   |
| 36   |       | 1,8 |        |                           |   |   |     |                 |   | 1,8 |
|      |       |     |        |                           |   |   |     |                 |   | 0   |
|      |       |     |        |                           |   |   |     |                 |   |     |
| 37   |       |     |        |                           |   |   | 0,2 |                 |   | 0,2 |
|      |       |     |        |                           |   | 1 |     |                 |   | 1   |
| 38   |       | 1,8 |        |                           |   |   |     |                 |   | 1,8 |
|      |       |     |        |                           |   |   |     |                 |   | 0   |

| úsek | Kotel | OT  | kolena | T-kus + křížení pravoúhlé |   |   |     | T-kus pravoúhlý |   | ξ   |
|------|-------|-----|--------|---------------------------|---|---|-----|-----------------|---|-----|
|      |       |     |        | 1,5                       | 2 | 1 | 0,2 | 8               | 3 |     |
| 39   |       | 1,8 | 2      |                           |   |   |     |                 |   | 3,8 |
|      |       |     | 2      |                           |   |   |     |                 |   | 2   |
| 41   |       | 4   |        |                           |   |   |     |                 |   | 4   |
|      |       |     |        |                           |   |   |     |                 |   | 0   |
| 40   |       |     | 2      |                           |   |   | 0,2 |                 |   | 2,2 |
|      |       |     |        |                           |   | 1 |     |                 |   | 1   |
| 42   |       |     |        |                           |   |   |     |                 | 3 | 3   |
|      |       |     |        |                           |   |   |     | 8               |   | 8   |
| 43   |       |     | 2      |                           |   |   |     |                 | 3 | 5   |
|      |       |     | 2      |                           |   |   |     | 8               |   | 10  |
|      |       |     |        |                           |   |   |     |                 |   | 0   |
| 37   |       |     |        |                           |   |   | 0,2 |                 |   | 0,2 |
|      |       |     |        |                           |   | 1 |     |                 |   | 1   |
| 38   |       | 1,8 |        |                           |   |   |     |                 |   | 1,8 |
|      |       |     |        |                           |   |   |     |                 |   | 0   |
| 39   |       | 1,8 | 2      |                           |   |   |     |                 |   | 3,8 |
|      |       |     | 2      |                           |   |   |     |                 |   | 2   |
| 41   |       | 4   |        |                           |   |   |     |                 |   | 4   |
|      |       |     |        |                           |   |   |     |                 |   | 0   |
| 40   |       |     | 2      |                           |   |   | 0,2 |                 |   | 2,2 |
|      |       |     |        |                           |   | 1 |     |                 |   | 1   |
| 42   |       |     |        |                           |   |   |     |                 | 3 | 3   |
|      |       |     |        |                           |   |   |     | 8               |   | 8   |
| 43   |       |     | 2      |                           |   |   |     |                 | 3 | 5   |
|      |       |     | 2      |                           |   |   |     | 8               |   | 10  |
|      |       |     |        |                           |   |   |     |                 |   | 0   |
| 37   |       |     |        |                           |   |   | 0,2 |                 |   | 0,2 |
|      |       |     |        |                           |   | 1 |     |                 |   | 1   |
| 38   |       | 1,8 |        |                           |   |   |     |                 |   | 1,8 |
|      |       |     |        |                           |   |   |     |                 |   | 0   |
| 39   |       | 1,8 | 2      |                           |   |   |     |                 |   | 3,8 |

| úsek | Kotel | OT | kolena | T-kus + křížení pravouhlé |   |   |     | T-kus pravouhlý |   | ξ   |
|------|-------|----|--------|---------------------------|---|---|-----|-----------------|---|-----|
|      |       |    |        | 1,5                       | 2 | 1 | 0,2 | 8               | 3 |     |
|      |       |    | 2      |                           |   |   |     |                 |   | 2   |
| 41   |       | 4  |        |                           |   |   |     |                 |   | 4   |
|      |       |    |        |                           |   |   |     |                 |   | 0   |
| 40   |       |    | 2      |                           |   |   | 0,2 |                 |   | 2,2 |
|      |       |    |        |                           |   | 1 |     |                 |   | 1   |
| 42   |       |    |        |                           |   |   |     |                 | 3 | 3   |
|      |       |    |        |                           |   |   |     | 8               |   | 8   |
| 43   |       |    | 2      |                           |   |   |     |                 | 3 | 5   |
|      |       |    | 2      |                           |   |   |     | 8               |   | 10  |