

2. Kedepan diharapkan ada penelitian lanjutan yang menggabungkan efek ekonomis dan kestabilan. Selain dihasilkan operasi yang ekonomis juga diikuti dengan hasil kestabilan yang lebih baik.

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Lampiran

Hasil simulasi GSA

lihat =

| | | | | | |
|---------|---------|---------|--------|---------|--------|
| 1.701 | 7.6662 | 25.91 | 2.3597 | 0.34021 | 566.71 |
| 5.636 | 3.9681 | 61.583 | 1.3368 | 0.78727 | 566.37 |
| 3.8103 | 0.75321 | 30.432 | 1.5662 | 0.76581 | 566.73 |
| 4.9824 | 8.4605 | 38.32 | 1.2402 | 0.78864 | 566.52 |
| 5.2228 | 13.605 | 0.89903 | 2.1853 | 0.24018 | 567.5 |
| 9.7566 | 20.858 | 48.081 | 1.2588 | 0.31715 | 566.3 |
| 8.0705 | 17.084 | 46.399 | 2.8319 | 0.45404 | 566.37 |
| 0.94698 | 22.891 | 13.741 | 1.0072 | 0.52225 | 566.71 |
| 1.0527 | 19.086 | 24.953 | 2.8192 | 0.47797 | 566.68 |
| 3.2363 | 4.8364 | 16.558 | 1.4545 | 0.57555 | 567 |
| 6.9502 | 24.127 | 5.0992 | 2.6084 | 0.50154 | 566.92 |
| 10.321 | 9.1954 | 13.913 | 1.0646 | 0.67507 | 566.72 |
| 4.2378 | 15.263 | 30.415 | 2.5039 | 0.62621 | 566.57 |
| 5.3544 | 18.486 | 32.303 | 1.3469 | 0.54164 | 566.47 |

1 21.867 52.47 3.1381 0.29426 566.35

8 8.8349 25.939 2.0819 0.57536 566.6



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|--------|--------|---------|--------|---------|--------|
| 8.2184 | 11.979 | 25.256 | 2.1293 | 0.7555 | 566.61 |
| 8.8438 | 4.797 | 59.552 | 1.54 | 0.78992 | 566.36 |
| 10.484 | 12.06 | 21.077 | 1.7759 | 0.6339 | 566.59 |
| 1.289 | 11.817 | 8.5326 | 2.0718 | 0.31254 | 567.3 |
| 9.0276 | 3.8497 | 43.526 | 2.0791 | 0.71608 | 566.45 |
| 5.5986 | 16.268 | 57.689 | 1.9763 | 0.27744 | 566.3 |
| 3.6696 | 22.49 | 30.573 | 1.2807 | 0.64608 | 566.48 |
| 1.2597 | 11.115 | 31.705 | 1.4154 | 0.22873 | 566.54 |
| 8.896 | 5.0143 | 0.48818 | 2.3658 | 0.58982 | 567.6 |
| 10.043 | 7.9013 | 11.942 | 2.2796 | 0.23572 | 566.79 |
| 8.774 | 2.1744 | 48.772 | 1.343 | 0.75186 | 566.43 |
| 9.409 | 2.2092 | 38.254 | 2.8576 | 0.30303 | 566.44 |
| 4.3406 | 1.3965 | 49.57 | 2.1063 | 0.25283 | 566.39 |
| 2.7655 | 14.099 | 52.401 | 3.0937 | 0.38273 | 566.38 |
| 4.6904 | 14.404 | 43.022 | 1.5709 | 0.60296 | 566.43 |
| 3.4351 | 8.1364 | 5.2733 | 3.0375 | 0.32267 | 567.66 |
| 1.0206 | 19.047 | 50.423 | 2.2828 | 0.78489 | 566.43 |
| 9 | 17.024 | 8.5966 | 2.656 | 0.22374 | 567.03 |
| 5 | 23.541 | 35.706 | 1.0803 | 0.49507 | 566.41 |



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|--------|--------|--------|--------|---------|--------|
| 2.8826 | 12.515 | 36.003 | 2.2465 | 0.58456 | 566.53 |
| 4.3797 | 13.314 | 1.2032 | 2.9285 | 0.44301 | 567.72 |
| 6.3219 | 19.888 | 58.44 | 2.0666 | 0.23425 | 566.29 |
| 2.078 | 14.601 | 38.501 | 2.1176 | 0.5782 | 566.5 |
| 2.7813 | 19.337 | 41.852 | 2.7049 | 0.32875 | 566.42 |
| 5.823 | 23.064 | 26.476 | 2.3878 | 0.57783 | 566.54 |
| 4.9841 | 5.8499 | 43.982 | 1.9634 | 0.43674 | 566.44 |
| 8.355 | 15.497 | 29.524 | 2.1717 | 0.67766 | 566.52 |
| 3.883 | 12.044 | 25.674 | 2.5821 | 0.72742 | 566.7 |
| 9.0974 | 15.705 | 61.792 | 2.0767 | 0.66805 | 566.31 |
| 10.192 | 5.675 | 30.431 | 1.2069 | 0.62149 | 566.52 |
| 8.6653 | 17.182 | 7.5055 | 1.5325 | 0.4524 | 566.79 |
| 4.2357 | 1.1699 | 53.659 | 2.9839 | 0.58631 | 566.42 |
| 8.1948 | 6.2452 | 21.505 | 2.2426 | 0.24699 | 566.64 |
| 1.1453 | 22.926 | 19.91 | 2.1317 | 0.42845 | 566.69 |
| 7.1286 | 19.385 | 23.72 | 3.0114 | 0.46261 | 566.58 |
| 1.9533 | 13.683 | 54.394 | 1.5049 | 0.44417 | 566.36 |
| 2 | 2.4082 | 33.308 | 2.9553 | 0.36427 | 566.63 |
| 6 | 5.5899 | 1.7672 | 2.1712 | 0.33881 | 568.91 |



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|--------|--------|--------|--------|---------|--------|
| 1.0695 | 1.0414 | 15.673 | 2.5725 | 0.64274 | 567.38 |
| 10.622 | 24.189 | 45.285 | 2.4523 | 0.72764 | 566.36 |
| 6.1992 | 20.931 | 27.137 | 1.2488 | 0.66349 | 566.5 |
| 8.5743 | 11.549 | 16.488 | 3.0914 | 0.2215 | 566.7 |
| 6.8633 | 24.77 | 12 | 1.8782 | 0.53259 | 566.68 |
| 8.3959 | 20.011 | 13.562 | 1.1084 | 0.5529 | 566.61 |
| 4.0836 | 12.599 | 31.032 | 1.1785 | 0.34771 | 566.5 |
| 9.5188 | 3.9168 | 2.256 | 3.0887 | 0.43903 | 567.45 |
| 5.8747 | 5.8969 | 23.414 | 2.2005 | 0.68407 | 566.74 |
| 1.9805 | 20.904 | 22.421 | 2.0093 | 0.3811 | 566.63 |
| 9.1502 | 8.6018 | 17.314 | 2.3654 | 0.49378 | 566.72 |
| 7.655 | 18.665 | 16.672 | 1.4222 | 0.66877 | 566.63 |
| 4.7247 | 4.6269 | 46.583 | 2.4757 | 0.46999 | 566.44 |
| 8.1894 | 18.488 | 8.4039 | 1.4831 | 0.69994 | 566.78 |
| 5.1035 | 2.0521 | 50.232 | 2.3403 | 0.606 | 566.44 |
| 1.375 | 18.074 | 19.164 | 3.0619 | 0.25198 | 566.77 |
| 6.8138 | 3.7021 | 21.559 | 2.5454 | 0.78843 | 566.81 |
| 9 | 24.613 | 41.277 | 3.0829 | 0.53986 | 566.43 |
| 3 | 15.133 | 2.6275 | 2.6243 | 0.32461 | 567.38 |



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|--------|--------|--------|---------|---------|--------|
| 6.825 | 7.2864 | 48.304 | 2.1005 | 0.25737 | 566.36 |
| 4.0446 | 11.226 | 43.192 | 1.9274 | 0.23751 | 566.4 |
| 2.3148 | 23.315 | 57.967 | 2.3508 | 0.21547 | 566.3 |
| 10.993 | 13.066 | 4.0638 | 1.6188 | 0.40048 | 566.89 |
| 1.905 | 2.3044 | 43.029 | 1.9199 | 0.53408 | 566.52 |
| 4.2362 | 16.733 | 45.411 | 2.4102 | 0.70756 | 566.43 |
| 1.1902 | 11.642 | 52.939 | 2.7572 | 0.57605 | 566.42 |
| 10.282 | 4.3188 | 34.702 | 1.645 | 0.55992 | 566.49 |
| 4.6359 | 19.549 | 52.681 | 2.3921 | 0.32638 | 566.33 |
| 10.969 | 13.633 | 3.2476 | 2.0569 | 0.35235 | 566.95 |
| 6.3867 | 2.8814 | 47.474 | 1.288 | 0.59118 | 566.43 |
| 6.5909 | 22.586 | 42.315 | 1.6142 | 0.39735 | 566.36 |
| 2.7316 | 21.803 | 54.677 | 1.1723 | 0.5139 | 566.32 |
| 3.0153 | 2.1153 | 20.818 | 2.8641 | 0.27483 | 566.86 |
| 5.789 | 16.271 | 32.503 | 2.4405 | 0.47162 | 566.5 |
| 3.0565 | 22.315 | 28.481 | 2.7674 | 0.79556 | 566.6 |
| 10.431 | 9.1823 | 11.383 | 3.0308 | 0.43954 | 566.83 |
| 16.918 | 52.993 | 2.3336 | 0.23715 | 566.33 | |
| 11.771 | 3.0923 | 2.0746 | 0.37578 | 567.02 | |



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|--------|---------|--------|---------|---------|--------|
| 9.1775 | 11.587 | 32.82 | 2.1687 | 0.53136 | 566.48 |
| 4.3939 | 1.163 | 14.697 | 3.1222 | 0.64408 | 567.17 |
| 1.0221 | 21.639 | 56.474 | 2.3255 | 0.39104 | 566.34 |
| 4.3056 | 23.492 | 33.92 | 2.823 | 0.49631 | 566.48 |
| 4.7516 | 12.36 | 6.3481 | 2.0235 | 0.5772 | 567.2 |
| 1.759 | 14.568 | 53.596 | 0.98411 | 0.65189 | 566.37 |
| 10.764 | 24.825 | 2.8626 | 1.4789 | 0.61633 | 566.72 |
| 2.7537 | 10.55 | 9.0492 | 2.1557 | 0.28213 | 567.2 |
| 2.4923 | 6.0812 | 13.75 | 1.1645 | 0.74418 | 567.15 |
| 6.0123 | 21.763 | 48.636 | 1.9882 | 0.42733 | 566.34 |
| 6.0247 | 17.459 | 22.479 | 1.3257 | 0.51777 | 566.57 |
| 1.3292 | 4.9081 | 1.7777 | 1.6591 | 0.79317 | 569 |
| 4.5729 | 0.96883 | 52.144 | 1.184 | 0.77493 | 566.46 |
| 6.8117 | 4.8501 | 22.827 | 1.8864 | 0.69059 | 566.73 |
| 11.026 | 5.7549 | 49.327 | 2.529 | 0.45434 | 566.36 |
| 5.2732 | 22.614 | 55.003 | 2.6364 | 0.69079 | 566.35 |
| 7.9549 | 17.947 | 42.346 | 2.9891 | 0.4667 | 566.4 |
| 3.9493 | 34.169 | 2.6129 | 0.42816 | 566.63 | |
| 11.061 | 56.201 | 1.6748 | 0.62434 | 566.38 | |



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|--------|--------|--------|--------|---------|--------|
| 10.047 | 16.79 | 6.3984 | 2.886 | 0.34335 | 566.88 |
| 1.2767 | 8.5678 | 5.8655 | 2.1016 | 0.30546 | 567.72 |
| 1.1015 | 15.238 | 2.3331 | 1.5308 | 0.34289 | 567.56 |
| 6.7053 | 5.8582 | 20.396 | 1.3118 | 0.37015 | 566.7 |
| 4.2994 | 5.3482 | 10.546 | 1.0395 | 0.22439 | 567.09 |
| 3.0544 | 5.8017 | 62.38 | 1.3174 | 0.53085 | 566.35 |
| 10.093 | 18.049 | 26.085 | 2.986 | 0.7655 | 566.55 |
| 7.8221 | 6.8779 | 47.195 | 1.1801 | 0.6727 | 566.41 |
| 4.6205 | 7.2979 | 43.393 | 2.7835 | 0.34486 | 566.44 |
| 4.9235 | 12.433 | 48.211 | 1.2755 | 0.61759 | 566.4 |
| 2.9071 | 6.1013 | 57.034 | 2.8315 | 0.20915 | 566.34 |
| 3.2435 | 9.3506 | 19.555 | 2.2628 | 0.66113 | 566.86 |
| 9.8912 | 16.215 | 12.954 | 1.3771 | 0.39914 | 566.64 |
| 10.27 | 18.932 | 4.7404 | 2.7025 | 0.3934 | 566.89 |
| 8.8354 | 12.691 | 36.783 | 2.6801 | 0.65926 | 566.47 |
| 3.2869 | 15.722 | 33.997 | 1.1512 | 0.4305 | 566.47 |
| 6.7994 | 8.4967 | 40.327 | 1.3189 | 0.33118 | 566.42 |
| 1 | 8.0856 | 37.456 | 2.2722 | 0.53799 | 566.54 |
| 3 | 4.1884 | 28.236 | 1.6585 | 0.33238 | 566.67 |



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|--------|--------|--------|--------|---------|--------|
| 7.8692 | 21.225 | 10.327 | 1.5307 | 0.29758 | 566.68 |
| 10.162 | 7.7377 | 47.855 | 2.6844 | 0.43978 | 566.37 |
| 8.5197 | 22.789 | 61.46 | 2.3027 | 0.21224 | 566.26 |
| 9.2595 | 3.4953 | 9.118 | 2.4571 | 0.45396 | 567.04 |
| 3.1142 | 15.636 | 51.766 | 2.4813 | 0.20196 | 566.34 |
| 4.7758 | 7.6347 | 55.095 | 2.9998 | 0.22692 | 566.34 |
| 5.1041 | 13.072 | 4.5891 | 1.2056 | 0.31347 | 567.1 |
| 10.42 | 13.818 | 29.971 | 2.2812 | 0.3208 | 566.46 |
| 1.8851 | 2.0146 | 46.224 | 2.0226 | 0.56021 | 566.5 |
| 6.2617 | 11.349 | 45.912 | 2.1106 | 0.33903 | 566.38 |
| 7.1859 | 6.0542 | 51.052 | 1.4303 | 0.53993 | 566.38 |
| 3.6819 | 23.02 | 33.436 | 2.5935 | 0.53045 | 566.49 |
| 2.833 | 17.518 | 35.14 | 1.5105 | 0.4028 | 566.46 |
| 4.9982 | 3.5612 | 21.789 | 1.38 | 0.79395 | 566.84 |
| 4.5276 | 9.4709 | 34.512 | 2.8661 | 0.28902 | 566.51 |
| 2.4643 | 8.1719 | 1.5147 | 1.0001 | 0.71077 | 567.95 |
| 9.9854 | 8.0795 | 46.101 | 1.0203 | 0.67231 | 566.39 |

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|---|--------|--------|-------|---------|--------|
| 1 | 14.365 | 52.156 | 1.908 | 0.51458 | 566.36 |
|---|--------|--------|-------|---------|--------|

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|---|--------|--------|--------|--------|--------|
| 8 | 20.055 | 52.303 | 1.0852 | 0.2113 | 566.28 |
|---|--------|--------|--------|--------|--------|



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|--------|--------|--------|---------|---------|--------|
| 2.9632 | 12.146 | 2.2634 | 3.1044 | 0.35807 | 567.89 |
| 5.6434 | 19.936 | 57.028 | 2.3299 | 0.79915 | 566.35 |
| 1.3131 | 10.905 | 6.1138 | 2.3905 | 0.62632 | 567.67 |
| 5.8982 | 18.684 | 53.212 | 1.6647 | 0.33085 | 566.32 |
| 3.5727 | 9.4199 | 32.733 | 1.9909 | 0.58497 | 566.58 |
| 7.8333 | 23.783 | 1.2196 | 0.97589 | 0.27264 | 566.77 |
| 8.4894 | 18.941 | 8.2477 | 1.3821 | 0.53401 | 566.74 |
| 4.8261 | 1.2248 | 37.155 | 2.8373 | 0.67278 | 566.58 |
| 6.5447 | 19.063 | 45.167 | 1.0893 | 0.4487 | 566.35 |
| 8.3275 | 22.861 | 2.5067 | 1.6268 | 0.2502 | 566.84 |
| 7.0875 | 9.183 | 11.175 | 2.7668 | 0.55226 | 566.98 |
| 6.775 | 2.4787 | 14.681 | 2.2922 | 0.58356 | 566.98 |
| 1.5258 | 21.486 | 44.745 | 2.9613 | 0.27509 | 566.4 |
| 4.6473 | 3.0381 | 48.208 | 2.8939 | 0.71916 | 566.47 |
| 1.1453 | 14.077 | 36.918 | 1.4821 | 0.49267 | 566.5 |
| 4.9752 | 22.951 | 54.584 | 3.0576 | 0.36561 | 566.33 |
| 7.5638 | 13.409 | 28.484 | 1.9396 | 0.38688 | 566.51 |
| 5 | 2.0102 | 61.499 | 2.9037 | 0.59994 | 566.35 |
| 3 | 11.442 | 16.396 | 1.9673 | 0.50006 | 566.66 |



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|--------|--------|--------|---------|---------|--------|
| 5.3401 | 17.511 | 43.229 | 2.2333 | 0.46648 | 566.4 |
| 8.7962 | 7.0884 | 37.377 | 0.96581 | 0.39535 | 566.43 |
| 6.654 | 22.476 | 17.602 | 2.5498 | 0.53955 | 566.65 |
| 1.0169 | 11.898 | 17.595 | 1.8578 | 0.20913 | 566.84 |
| 6.0662 | 6.3765 | 42.799 | 1.2022 | 0.5317 | 566.44 |
| 4.9896 | 5.5016 | 50.743 | 2.2577 | 0.76149 | 566.44 |
| 3.0599 | 21.355 | 4.9498 | 0.95036 | 0.48906 | 566.89 |
| 3.1691 | 18.734 | 23.212 | 3.0162 | 0.39709 | 566.66 |
| 5.3083 | 16.809 | 50.429 | 2.468 | 0.68185 | 566.39 |
| 10.257 | 3.3469 | 59.904 | 1.5407 | 0.28608 | 566.3 |
| 4.0797 | 21.027 | 62.11 | 2.6058 | 0.24717 | 566.29 |
| 3.723 | 11.782 | 26.713 | 2.3949 | 0.46724 | 566.64 |
| 4.5396 | 16.528 | 27.185 | 1.567 | 0.47931 | 566.55 |
| 5.933 | 22.682 | 21.285 | 2.1237 | 0.64201 | 566.6 |
| 9.163 | 3.4346 | 28.526 | 1.0731 | 0.61942 | 566.58 |
| 3.2139 | 15.393 | 48.169 | 2.4371 | 0.51985 | 566.41 |
| 1.0289 | 1.1473 | 47.28 | 2.9796 | 0.32379 | 566.46 |
| 5 | 2.9619 | 62.026 | 1.9713 | 0.29418 | 566.32 |
| 1 | 22.713 | 12.851 | 1.7551 | 0.44134 | 566.74 |



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|---------|--------|--------|---------|---------|--------|
| 9.2905 | 14.03 | 23.588 | 2.9674 | 0.46255 | 566.58 |
| 2.2021 | 16.372 | 44.35 | 0.96558 | 0.78504 | 566.43 |
| 9.1739 | 6.47 | 10.386 | 2.9936 | 0.75605 | 567 |
| 9.652 | 15.799 | 20.383 | 2.4725 | 0.38484 | 566.58 |
| 6.4842 | 2.6653 | 50.601 | 2.7549 | 0.71755 | 566.44 |
| 0.99049 | 16.409 | 13.841 | 2.8356 | 0.53614 | 567.03 |
| 6.0204 | 5.0253 | 20.659 | 1.1844 | 0.5265 | 566.75 |
| 8.1363 | 15.759 | 28.982 | 2.498 | 0.70537 | 566.54 |
| 7.9728 | 24.28 | 22.15 | 2.1592 | 0.67278 | 566.55 |
| 9.9847 | 16.978 | 4.7815 | 2.0906 | 0.52182 | 566.88 |
| 8.0082 | 8.7964 | 31.674 | 1.6333 | 0.2011 | 566.47 |
| 10.435 | 11.854 | 17.283 | 1.2967 | 0.42209 | 566.61 |
| 0.91198 | 1.355 | 35.564 | 1.6466 | 0.46167 | 566.63 |
| 9.2269 | 13.435 | 1.9139 | 2.4231 | 0.57992 | 567.15 |
| 1.1523 | 24.738 | 38.435 | 2.0979 | 0.28807 | 566.42 |
| 6.1061 | 18.292 | 26.591 | 2.2832 | 0.53922 | 566.55 |
| 7.5162 | 10.376 | 40.402 | 2.6203 | 0.44187 | 566.43 |
| 4 | 15.075 | 19.271 | 1.3021 | 0.23239 | 566.56 |
| 4 | 14.65 | 18.316 | 2.0325 | 0.28159 | 566.72 |



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|---------|--------|---------|---------|---------|--------|
| 6.9994 | 13.061 | 27.021 | 2.63 | 0.43431 | 566.56 |
| 9.9367 | 4.2795 | 34.482 | 1.6048 | 0.47453 | 566.48 |
| 7.4124 | 7.8055 | 7.8293 | 2.7939 | 0.39915 | 567.11 |
| 8.8807 | 12.903 | 8.3255 | 2.4424 | 0.7144 | 566.93 |
| 5.8489 | 4.1903 | 14.454 | 1.6659 | 0.56429 | 566.98 |
| 4.9476 | 10.605 | 6.8613 | 2.1296 | 0.31827 | 567.19 |
| 9.8201 | 15.133 | 5.9962 | 2.7916 | 0.28611 | 566.92 |
| 8.0801 | 20.377 | 11.948 | 1.477 | 0.66043 | 566.68 |
| 9.2963 | 12.162 | 42.782 | 0.98306 | 0.59163 | 566.39 |
| 0.90969 | 17.097 | 33.934 | 2.2825 | 0.40537 | 566.53 |
| 1.7823 | 19.112 | 32.684 | 2.1307 | 0.23397 | 566.49 |
| 6.385 | 5.1659 | 58.875 | 1.4402 | 0.45222 | 566.34 |
| 9.6019 | 15.776 | 39.916 | 2.9731 | 0.47652 | 566.41 |
| 3.5176 | 19.421 | 44.966 | 3.0085 | 0.5213 | 566.42 |
| 8.7726 | 10.961 | 26.643 | 2.0199 | 0.69705 | 566.58 |
| 7.3578 | 11.395 | 15.673 | 2.4818 | 0.79902 | 566.82 |
| 8.2536 | 12.603 | 58.512 | 2.0817 | 0.42944 | 566.31 |
| 6.0082 | 50.173 | 1.5704 | 0.31405 | 566.34 | |
| 20.948 | 47.65 | 0.96089 | 0.79543 | 566.34 | |



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|--------|--------|--------|---------|---------|--------|
| 2.9264 | 12.912 | 4.0472 | 1.5874 | 0.60796 | 567.4 |
| 1.2452 | 3.2412 | 56.685 | 2.4129 | 0.76094 | 566.45 |
| 2.3786 | 9.5857 | 41.046 | 1.2828 | 0.58185 | 566.49 |
| 8.1843 | 20.654 | 59.257 | 1.4385 | 0.58922 | 566.3 |
| 2.1225 | 3.729 | 34.169 | 2.8795 | 0.42957 | 566.61 |
| 3.0697 | 16.497 | 19.221 | 2.2787 | 0.21672 | 566.7 |
| 5.4626 | 18.613 | 5.7145 | 2.3695 | 0.55584 | 567.05 |
| 5.5829 | 17.984 | 26.462 | 1.0929 | 0.63878 | 566.52 |
| 1.723 | 3.3044 | 23.097 | 1.423 | 0.59187 | 566.89 |
| 6.0092 | 23.996 | 53.313 | 2.6638 | 0.23718 | 566.31 |
| 1.5865 | 11.025 | 61.498 | 2.3303 | 0.29182 | 566.32 |
| 2.5119 | 14.333 | 3.555 | 1.0961 | 0.65339 | 567.29 |
| 8.4865 | 3.1455 | 22.45 | 2.3925 | 0.4975 | 566.69 |
| 4.2394 | 12.466 | 62.442 | 2.0884 | 0.43062 | 566.32 |
| 3.936 | 4.4754 | 26.056 | 3.034 | 0.37299 | 566.7 |
| 9.2181 | 8.2304 | 23.914 | 0.98608 | 0.31182 | 566.54 |
| 10.895 | 3.9247 | 6.7153 | 2.5505 | 0.7684 | 567.09 |
| 1 | 9.0803 | 36.933 | 1.8207 | 0.43883 | 566.42 |
| 7 | 16.829 | 9.3158 | 2.4588 | 0.28349 | 566.87 |



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|--------|--------|--------|--------|---------|--------|
| 3.2002 | 13.268 | 23.661 | 1.1015 | 0.52482 | 566.63 |
| 3.8028 | 20.069 | 58.535 | 2.6153 | 0.21831 | 566.3 |
| 7.7263 | 14.732 | 43.833 | 1.0521 | 0.52907 | 566.37 |
| 6.698 | 2.3717 | 15.335 | 2.3597 | 0.43795 | 566.93 |
| 2.8529 | 6.7757 | 46.434 | 2.0467 | 0.65657 | 566.47 |
| 10.65 | 22.785 | 20.55 | 2.1115 | 0.29767 | 566.5 |
| 4.2557 | 22.321 | 23.248 | 2.5715 | 0.48086 | 566.6 |
| 2.3385 | 24.753 | 30.901 | 1.5468 | 0.55619 | 566.48 |
| 4.1758 | 8.5986 | 12.699 | 1.4661 | 0.2512 | 566.94 |
| 1.9626 | 24.695 | 18.115 | 2.6195 | 0.49828 | 566.73 |
| 8.7353 | 15.636 | 18.429 | 3.0618 | 0.66614 | 566.69 |
| 8.9475 | 16.563 | 26.979 | 1.3073 | 0.28029 | 566.46 |
| 6.8351 | 15.333 | 29.986 | 1.7767 | 0.62012 | 566.52 |
| 1.6141 | 20.097 | 58.259 | 1.1539 | 0.69844 | 566.34 |
| 2.783 | 15.553 | 52.297 | 3.0054 | 0.50789 | 566.39 |
| 8.7712 | 9.898 | 18.265 | 2.7144 | 0.20289 | 566.66 |
| 4.4329 | 4.9852 | 59.888 | 2.5538 | 0.41403 | 566.34 |
| 4 | 2.2029 | 45.246 | 2.6963 | 0.78381 | 566.46 |
| 4 | 4.4446 | 54.078 | 2.2076 | 0.28679 | 566.37 |



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|---------|--------|---------|--------|---------|--------|
| 7.977 | 10.048 | 32.798 | 1.7393 | 0.66486 | 566.51 |
| 2.7567 | 1.0673 | 3.4875 | 1.2965 | 0.41659 | 568.66 |
| 4.8792 | 24.16 | 60.009 | 2.8989 | 0.36895 | 566.3 |
| 4.2844 | 8.466 | 42.079 | 2.9334 | 0.52605 | 566.48 |
| 10.285 | 23.923 | 4.2786 | 2.6165 | 0.44434 | 566.82 |
| 9.4188 | 1.4523 | 61.2 | 1.7396 | 0.75218 | 566.36 |
| 7.2715 | 10.382 | 18.569 | 2.0367 | 0.41414 | 566.7 |
| 9.6972 | 7.4869 | 59.379 | 2.3957 | 0.26751 | 566.3 |
| 3.0235 | 9.5249 | 11.004 | 1.5786 | 0.35305 | 567.07 |
| 1.4672 | 19.676 | 0.25636 | 1.2562 | 0.29341 | 567.34 |
| 7.7698 | 11.557 | 54.928 | 1.621 | 0.68787 | 566.36 |
| 6.301 | 2.1398 | 53.188 | 1.7078 | 0.57778 | 566.4 |
| 6.1184 | 1.9139 | 21.158 | 1.2484 | 0.59562 | 566.81 |
| 3.4288 | 13.622 | 6.326 | 1.4179 | 0.59847 | 567.16 |
| 9.5671 | 19.344 | 39.332 | 2.1684 | 0.52837 | 566.39 |
| 9.2625 | 15.655 | 25.146 | 1.0531 | 0.37157 | 566.48 |
| 0.97036 | 23.361 | 58.018 | 1.8623 | 0.25839 | 566.3 |

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|--------|--------|--------|---------|--------|
| 19.703 | 55.062 | 2.5126 | 0.69873 | 566.36 |
| 19.056 | 38.769 | 2.8832 | 0.38901 | 566.39 |



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|--------|--------|---------|---------|---------|--------|
| 5.5146 | 8.6608 | 55.893 | 2.2693 | 0.55927 | 566.37 |
| 9.5377 | 13.408 | 13.224 | 1.9676 | 0.48126 | 566.72 |
| 6.3055 | 16.405 | 16.292 | 2.7421 | 0.59493 | 566.76 |
| 5.2626 | 13.148 | 0.45698 | 1.6519 | 0.3566 | 567.45 |
| 1.0512 | 16.806 | 5.8352 | 1.7718 | 0.37072 | 567.26 |
| 5.9848 | 6.3593 | 37.32 | 1.245 | 0.61463 | 566.5 |
| 9.8103 | 24.577 | 18.847 | 2.3844 | 0.78409 | 566.57 |
| 10.137 | 2.8335 | 48.51 | 0.99634 | 0.36953 | 566.36 |

Cost

1.0136798e+01 2.8335475e+00 4.8509526e+01 9.9633726e-01



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Cost

7.1712677e+00 2.2142368e+01 3.8133394e+01 1.9136785e+00

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|--------|--------|--------|---------|---------|--------|
| 9.579 | 22.077 | 53.125 | 2.1435 | 0.25934 | 618.82 |
| 10.066 | 8.1975 | 35.632 | 2.6044 | 0.27627 | 618.99 |
| 9.4121 | 15.935 | 28.894 | 2.8787 | 0.68098 | 619.1 |
| 8.5334 | 16.124 | 4.4118 | 2.9152 | 0.35293 | 619.71 |
| 3.4639 | 8.054 | 24.074 | 2.8314 | 0.49996 | 619.36 |
| 10.537 | 14.887 | 46.327 | 2.45 | 0.5138 | 618.91 |
| 9.5085 | 3.3611 | 32.741 | 1.8408 | 0.21176 | 619.04 |
| 9.4596 | 20.111 | 31.148 | 1.0458 | 0.72621 | 618.99 |
| 8.7892 | 21.972 | 51.921 | 1.4669 | 0.47606 | 618.84 |
| 5.6702 | 16.456 | 1.2452 | 0.97085 | 0.78796 | 619.75 |
| 9.55 | 2.0854 | 16.651 | 1.7836 | 0.54168 | 619.44 |
| 10.352 | 23.51 | 9.0404 | 2.9447 | 0.72458 | 619.37 |
| 2 | 2.1556 | 2.2541 | 1.6109 | 0.34491 | 622.74 |
| 5 | 6.7918 | 18.224 | 2.8568 | 0.27054 | 619.33 |



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|--------|--------|--------|--------|---------|--------|
| 5.5938 | 9.8466 | 55.888 | 1.2653 | 0.29084 | 618.86 |
| 6.8775 | 10.778 | 10.361 | 1.6249 | 0.2357 | 619.52 |
| 10.921 | 4.7557 | 61.813 | 1.8643 | 0.32012 | 618.82 |
| 9.5072 | 23.593 | 8.3801 | 1.4045 | 0.72095 | 619.26 |
| 10.84 | 3.8551 | 29.313 | 2.6361 | 0.66252 | 619.15 |
| 4.3451 | 19.068 | 23.261 | 1.476 | 0.75912 | 619.2 |
| 3.6513 | 16.274 | 41.166 | 2.8984 | 0.24845 | 618.98 |
| 4.0527 | 8.1854 | 54.623 | 1.5976 | 0.24193 | 618.88 |
| 4.2591 | 3.5562 | 18.571 | 1.3614 | 0.78638 | 619.63 |
| 6.4345 | 23.922 | 17.197 | 2.5403 | 0.51302 | 619.25 |
| 3.7319 | 20.736 | 5.2395 | 3.0546 | 0.67262 | 619.92 |
| 10.215 | 4.4408 | 11.809 | 2.9322 | 0.38585 | 619.52 |
| 7.6946 | 10.278 | 47.549 | 2.4883 | 0.27111 | 618.9 |
| 8.8748 | 11.972 | 56.869 | 2.7378 | 0.49126 | 618.87 |
| 2.6813 | 18.642 | 40.36 | 2.8548 | 0.44917 | 619.02 |
| 2.2483 | 21.985 | 32.437 | 2.903 | 0.7495 | 619.15 |
| 1.3731 | 24.366 | 43.909 | 1.4493 | 0.29567 | 618.91 |
| 9 | 18.304 | 3.0081 | 2.3245 | 0.32216 | 619.74 |
| 6 | 15.856 | 55.663 | 1.4791 | 0.29005 | 618.83 |



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|--------|--------|--------|--------|---------|--------|
| 4.6554 | 21.171 | 42.104 | 1.9183 | 0.77462 | 618.99 |
| 1.0325 | 9.9175 | 10.472 | 2.67 | 0.64921 | 620.15 |
| 2.4371 | 22.543 | 31.51 | 2.522 | 0.32387 | 619.07 |
| 6.0096 | 19.877 | 33.332 | 1.4806 | 0.59942 | 619.02 |
| 8.8921 | 22.788 | 39.075 | 2.5706 | 0.33174 | 618.93 |
| 8.6337 | 10.969 | 60.293 | 2.9463 | 0.46958 | 618.85 |
| 10.405 | 2.4617 | 35.66 | 2.8013 | 0.76422 | 619.1 |
| 8.9744 | 22.757 | 36.189 | 3.0869 | 0.54916 | 618.99 |
| 5.4698 | 15.609 | 58.605 | 1.2557 | 0.28864 | 618.82 |
| 4.3404 | 18.946 | 4.0352 | 2.8338 | 0.57772 | 619.96 |
| 2.1658 | 14.825 | 41.255 | 2.6241 | 0.31058 | 619 |
| 6.5695 | 24.867 | 6.3925 | 2.6202 | 0.24974 | 619.5 |
| 2.9343 | 4.7723 | 38.12 | 1.9553 | 0.32836 | 619.08 |
| 2.0131 | 17.939 | 50.311 | 1.7888 | 0.51586 | 618.93 |
| 8.6915 | 4.7925 | 2.2132 | 1.1774 | 0.60002 | 620.13 |
| 5.5006 | 2.6738 | 32.716 | 1.9466 | 0.4754 | 619.17 |
| 8.2617 | 16.126 | 18.743 | 1.2654 | 0.32928 | 619.15 |
| 1 | 14.123 | 41.358 | 1.5888 | 0.33217 | 618.99 |
| 4 | 19.478 | 37.438 | 1.7807 | 0.73405 | 619.02 |



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|--------|--------|--------|--------|---------|--------|
| 6.5299 | 2.0809 | 4.0345 | 2.9832 | 0.38093 | 620.5 |
| 9.5954 | 1.8811 | 55.72 | 1.3676 | 0.35004 | 618.87 |
| 10.175 | 14.876 | 59.593 | 2.3877 | 0.73797 | 618.86 |
| 4.4117 | 19.222 | 11.469 | 1.8112 | 0.27184 | 619.42 |
| 4.6279 | 5.2426 | 4.7819 | 1.3676 | 0.59912 | 620.38 |
| 1.851 | 13.747 | 61.754 | 1.0101 | 0.39648 | 618.84 |
| 7.5601 | 14.662 | 26.859 | 2.712 | 0.39566 | 619.12 |
| 3.0494 | 15.42 | 47.485 | 1.6324 | 0.69529 | 618.97 |
| 9.7069 | 1.7392 | 57.713 | 2.5907 | 0.53013 | 618.89 |
| 4.8442 | 7.3005 | 54.533 | 2.2453 | 0.58687 | 618.94 |
| 5.4659 | 5.0895 | 60.218 | 1.5951 | 0.70708 | 618.92 |
| 2.6684 | 13.547 | 18.688 | 2.7423 | 0.557 | 619.48 |
| 1.4933 | 18.576 | 44.435 | 2.9125 | 0.39859 | 618.99 |
| 8.8652 | 23.003 | 56.338 | 2.243 | 0.32685 | 618.82 |
| 9.0432 | 1.492 | 54.663 | 2.7416 | 0.57541 | 618.92 |
| 5.5639 | 20.737 | 51.822 | 2.1668 | 0.35784 | 618.87 |
| 9.5629 | 21.299 | 2.3935 | 2.7402 | 0.78539 | 619.63 |
| 7 | 12.139 | 56.652 | 1.0248 | 0.29681 | 618.83 |
| 4 | 9.7302 | 39.32 | 2.8152 | 0.67673 | 619.12 |



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|--------|--------|--------|--------|---------|--------|
| 1.1091 | 2.5842 | 35.873 | 1.193 | 0.75466 | 619.27 |
| 2.1341 | 4.8715 | 46.189 | 1.2741 | 0.47978 | 619.02 |
| 4.0444 | 17.045 | 31.862 | 2.549 | 0.56814 | 619.12 |
| 8.3202 | 15.061 | 54.079 | 1.3864 | 0.44629 | 618.85 |
| 8.7462 | 16.944 | 8.9369 | 2.571 | 0.78153 | 619.51 |
| 2.3273 | 11.669 | 41.14 | 2.8564 | 0.59192 | 619.08 |
| 8.9808 | 19.955 | 37.144 | 1.402 | 0.66285 | 618.96 |
| 2.4997 | 11.803 | 32.183 | 2.5506 | 0.4491 | 619.16 |
| 8.1718 | 22.441 | 15.44 | 2.2954 | 0.28944 | 619.21 |
| 1.6076 | 2.5095 | 60.849 | 2.0737 | 0.49659 | 618.92 |
| 4.8489 | 16.159 | 57.28 | 3.0601 | 0.70922 | 618.91 |
| 9.1867 | 20.359 | 40.82 | 1.3476 | 0.60667 | 618.92 |
| 6.2481 | 8.5366 | 7.0843 | 1.3836 | 0.46756 | 619.8 |
| 10.539 | 13.75 | 32.261 | 2.3967 | 0.49825 | 619.03 |
| 4.0555 | 21.752 | 30.17 | 2.5734 | 0.29368 | 619.07 |
| 6.7435 | 13.705 | 4.4471 | 1.7674 | 0.61872 | 619.78 |
| 2.7556 | 19.995 | 24.425 | 3.0971 | 0.32282 | 619.22 |
| 4 | 14.966 | 50.364 | 1.0178 | 0.60642 | 618.91 |
| 7 | 22.127 | 49.209 | 1.6654 | 0.2747 | 618.83 |



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| 4.3331 | 11.497 | 7.6746 | 2.3786 | 0.55728 | 619.93 |
| 10.14 | 3.0092 | 25.866 | 1.027 | 0.66375 | 619.21 |
| 7.972 | 23.29 | 49.92 | 1.2397 | 0.54775 | 618.85 |
| 1.106 | 10.9 | 15.944 | 1.4676 | 0.61036 | 619.63 |
| 5.7475 | 13.523 | 36.8 | 2.8392 | 0.45638 | 619.04 |
| 7.7586 | 17.505 | 2.4885 | 2.961 | 0.36608 | 619.85 |
| 4.9375 | 2.0754 | 42.666 | 0.95681 | 0.78682 | 619.1 |
| 2.3841 | 9.0049 | 51.711 | 1.4841 | 0.77895 | 619 |
| 6.5688 | 19.975 | 43.804 | 2.2875 | 0.63683 | 618.95 |
| 10.559 | 0.90872 | 22.115 | 3.1158 | 0.63487 | 619.31 |
| 10.662 | 2.0644 | 30.674 | 3.1043 | 0.58698 | 619.13 |
| 10.977 | 7.3963 | 17.901 | 2.3084 | 0.25151 | 619.24 |
| 9.3942 | 9.4189 | 16.77 | 3.0358 | 0.51674 | 619.36 |
| 7.5239 | 19.691 | 47.855 | 1.766 | 0.71093 | 618.91 |
| 9.7351 | 5.3295 | 36.607 | 1.4429 | 0.32599 | 619 |
| 9.6796 | 10.607 | 33.752 | 2.1957 | 0.69604 | 619.06 |
| 8.6326 | 17.578 | 61.919 | 2.1778 | 0.32385 | 618.81 |

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| 20.865 | 48.119 | 1.5612 | 0.4853 | 618.92 |
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| 13.995 | 36.714 | 2.8676 | 0.37996 | 619.09 |
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| 6.0314 | 22.874 | 49.47 | 2.8089 | 0.40698 | 618.89 |
| 1.7565 | 23.002 | 34.398 | 2.372 | 0.75677 | 619.11 |
| 5.3012 | 15.75 | 4.961 | 2.5393 | 0.21807 | 619.85 |
| 4.0071 | 22.829 | 29.75 | 1.5295 | 0.63202 | 619.07 |
| 4.6977 | 22.426 | 53.138 | 1.2096 | 0.42573 | 618.85 |
| 11.035 | 9.1234 | 25.312 | 1.2734 | 0.55282 | 619.11 |
| 9.7384 | 24.912 | 14.952 | 2.4161 | 0.39797 | 619.18 |
| 10.544 | 22.339 | 33.935 | 1.6838 | 0.71896 | 618.97 |
| 3.4143 | 9.5725 | 23.183 | 2.3051 | 0.71297 | 619.4 |
| 1.2985 | 19.735 | 47.456 | 2.6535 | 0.52886 | 618.97 |
| 9.3513 | 8.7118 | 48.111 | 2.5598 | 0.22605 | 618.89 |
| 7.8801 | 4.5502 | 21.775 | 2.5672 | 0.52015 | 619.33 |
| 6.9271 | 18.682 | 60.472 | 1.0724 | 0.69516 | 618.84 |
| 3.0075 | 16.07 | 22.367 | 1.4418 | 0.53976 | 619.25 |
| 6.3015 | 15.298 | 12.236 | 1.9705 | 0.33154 | 619.42 |
| 1.3732 | 6.5836 | 5.8728 | 2.9267 | 0.394 | 620.84 |
| 5.2312 | 7.5969 | 19.715 | 2.1428 | 0.23903 | 619.35 |
| 8 | 20.119 | 59.905 | 1.0663 | 0.42429 | 618.83 |
| 5 | 14.983 | 39.976 | 2.6958 | 0.35512 | 619 |



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| 10.439 | 8.0675 | 13.167 | 2.6524 | 0.35636 | 619.4 |
| 9.5109 | 7.9307 | 20.954 | 2.0649 | 0.48349 | 619.24 |
| 3.4418 | 6.2112 | 21.57 | 0.99691 | 0.2569 | 619.33 |
| 4.6777 | 13.007 | 55.949 | 3.0959 | 0.23789 | 618.87 |
| 8.3405 | 14.452 | 31.609 | 1.4756 | 0.68989 | 619.06 |
| 8.8413 | 2.4207 | 35.227 | 2.9312 | 0.24107 | 619.03 |
| 0.91963 | 4.7246 | 49.376 | 1.9309 | 0.37858 | 618.99 |
| 3.0791 | 13.13 | 22.063 | 1.0788 | 0.67254 | 619.29 |
| 1.4895 | 13.882 | 13.917 | 1.1594 | 0.47382 | 619.53 |
| 8.0541 | 13.118 | 51.462 | 1.7544 | 0.74611 | 618.92 |
| 9.8046 | 3.7065 | 4.9374 | 2.0749 | 0.5304 | 619.93 |
| 3.6525 | 4.5269 | 5.3202 | 1.78 | 0.45753 | 620.55 |
| 7.922 | 10.672 | 19.495 | 0.94375 | 0.43943 | 619.21 |
| 2.2291 | 17.571 | 53.497 | 2.5258 | 0.23798 | 618.88 |
| 4.6526 | 19.684 | 29.749 | 1.7026 | 0.62972 | 619.09 |
| 9.3928 | 16.182 | 20.4 | 2.3906 | 0.63195 | 619.2 |
| 7.9523 | 14.859 | 28.861 | 1.3142 | 0.6447 | 619.08 |
| 6 | 24.387 | 42.201 | 2.3127 | 0.61362 | 618.93 |
| 6 | 13.594 | 35.964 | 1.8784 | 0.35625 | 618.97 |



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| 3.8284 | 7.743 | 52.708 | 2.4364 | 0.20592 | 618.9 |
| 7.492 | 5.5081 | 4.9237 | 1.3352 | 0.41006 | 619.98 |
| 3.8699 | 5.9728 | 16.389 | 2.9013 | 0.7377 | 619.72 |
| 10.511 | 11.363 | 43.035 | 1.2935 | 0.64594 | 618.94 |
| 8.8265 | 14.499 | 27.145 | 1.1562 | 0.37639 | 619.04 |
| 9.2812 | 22.953 | 20.368 | 2.6228 | 0.31061 | 619.12 |
| 8.368 | 8.4154 | 3.0703 | 2.9159 | 0.29777 | 620.05 |
| 8.959 | 7.5648 | 19.535 | 1.4875 | 0.24547 | 619.23 |
| 4.965 | 15.758 | 26.779 | 2.2599 | 0.46219 | 619.16 |
| 2.1427 | 6.0958 | 38.55 | 1.1093 | 0.36297 | 619.07 |
| 2.4402 | 4.9214 | 15.34 | 1.5291 | 0.34226 | 619.71 |
| 9.1951 | 1.1481 | 52.826 | 2.8104 | 0.28793 | 618.89 |
| 1.1141 | 13.271 | 55.198 | 2.4518 | 0.48249 | 618.93 |
| 6.3922 | 0.80859 | 58.03 | 2.0172 | 0.63715 | 618.93 |
| 9.2656 | 14.233 | 35.252 | 1.7285 | 0.43484 | 618.98 |
| 10.55 | 14.227 | 19.076 | 1.4115 | 0.29361 | 619.13 |
| 5.5316 | 2.538 | 48.18 | 1.4457 | 0.28496 | 618.94 |
| 5 | 10.375 | 31.8 | 2.6302 | 0.74271 | 619.27 |
| 3 | 19.476 | 38.364 | 1.8155 | 0.41145 | 618.96 |



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|--------|---------|--------|--------|---------|--------|
| 2.8134 | 14.634 | 42.974 | 2.7581 | 0.29568 | 618.98 |
| 3.8708 | 10.524 | 5.4273 | 2.1003 | 0.72313 | 620.18 |
| 10.83 | 13.441 | 44.689 | 1.1671 | 0.68223 | 618.92 |
| 2.4994 | 10.268 | 18.789 | 1.0469 | 0.64049 | 619.45 |
| 8.7912 | 2.3754 | 14.728 | 3.0149 | 0.4953 | 619.54 |
| 4.3094 | 19.629 | 19.977 | 2.2986 | 0.44111 | 619.26 |
| 5.6738 | 19.285 | 17.77 | 3.1321 | 0.71756 | 619.37 |
| 1.8304 | 14.537 | 15.81 | 1.9937 | 0.3085 | 619.49 |
| 1.4187 | 15.651 | 7.8968 | 3.1117 | 0.75534 | 620.15 |
| 9.6585 | 15.03 | 41.825 | 2.2043 | 0.69322 | 618.97 |
| 1.5286 | 15.703 | 17.544 | 1.4538 | 0.61195 | 619.43 |
| 9.8751 | 6.5646 | 15.624 | 1.1986 | 0.4815 | 619.34 |
| 4.8487 | 19.934 | 35.634 | 1.2281 | 0.73276 | 619.01 |
| 5.3237 | 17.862 | 3.399 | 2.5794 | 0.78942 | 619.94 |
| 4.4055 | 18.644 | 51.483 | 1.2457 | 0.2194 | 618.85 |
| 1.1326 | 4.1066 | 2.5017 | 1.3536 | 0.69486 | 621.95 |
| 8.2588 | 0.88314 | 16.845 | 1.8162 | 0.59559 | 619.52 |
| 9 | 18.659 | 19.026 | 1.6826 | 0.46897 | 619.25 |
| 1 | 20.412 | 41.462 | 1.9538 | 0.54423 | 618.94 |



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|---------|--------|--------|--------|---------|--------|
| 8.7319 | 14.444 | 39.185 | 1.1674 | 0.67875 | 618.97 |
| 7.7604 | 2.1003 | 44.579 | 1.3167 | 0.57965 | 619.01 |
| 5.7948 | 8.5851 | 17.384 | 2.3575 | 0.67382 | 619.49 |
| 9.1487 | 23.39 | 62.256 | 2.6808 | 0.23574 | 618.79 |
| 1.5812 | 21.429 | 18.918 | 1.7629 | 0.43364 | 619.29 |
| 1.0913 | 17.404 | 31.429 | 1.6176 | 0.45214 | 619.12 |
| 5.2565 | 4.8055 | 8.4437 | 2.9238 | 0.59844 | 620.11 |
| 2.275 | 17.232 | 56.118 | 2.5409 | 0.58068 | 618.91 |
| 9.1066 | 2.6795 | 15.024 | 1.8388 | 0.73118 | 619.54 |
| 0.81804 | 14.354 | 4.3797 | 1.3519 | 0.5669 | 620.18 |
| 1.7892 | 11.882 | 22.978 | 1.054 | 0.56921 | 619.31 |
| 5.1348 | 16.878 | 61.815 | 3.0262 | 0.7263 | 618.89 |
| 3.217 | 11.277 | 13.409 | 1.8696 | 0.66012 | 619.67 |
| 10.631 | 1.4945 | 18.113 | 2.2575 | 0.65005 | 619.39 |
| 4.6189 | 11.478 | 31.636 | 2.0749 | 0.26937 | 619.09 |
| 5.8508 | 12.076 | 39.484 | 2.9198 | 0.32245 | 619 |
| 3.55 | 1.0018 | 24.695 | 1.3507 | 0.26976 | 619.36 |

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|---|--------|--------|--------|---------|--------|
| 2 | 15.144 | 42.562 | 1.1466 | 0.70488 | 618.96 |
| 1 | 8.0646 | 8.3011 | 1.065 | 0.42894 | 619.71 |



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|--------|--------|--------|--------|---------|--------|
| 10.863 | 20.779 | 4.5758 | 1.0453 | 0.47243 | 619.3 |
| 7.5924 | 22.961 | 3.0274 | 2.4488 | 0.24433 | 619.61 |
| 9.4994 | 7.2333 | 34.71 | 1.9909 | 0.2151 | 619 |
| 1.6958 | 7.9284 | 55.698 | 2.9887 | 0.77667 | 618.99 |
| 5.1472 | 2.9925 | 36.695 | 1.8491 | 0.29504 | 619.07 |
| 1.2257 | 18.351 | 33.315 | 2.8627 | 0.76019 | 619.19 |
| 6.9899 | 18.148 | 40.324 | 2.5091 | 0.34206 | 618.95 |
| 8.3193 | 15.806 | 25.588 | 3.0226 | 0.24533 | 619.11 |
| 7.8174 | 9.8708 | 16.484 | 2.0012 | 0.60353 | 619.39 |
| 1.4274 | 16.044 | 38.154 | 1.9005 | 0.2506 | 619.01 |
| 7.7544 | 13.294 | 39.623 | 2.0717 | 0.2373 | 618.94 |
| 3.9567 | 16.518 | 47.503 | 2.0991 | 0.6171 | 618.96 |
| 4.3805 | 21.878 | 14.772 | 1.9766 | 0.20124 | 619.29 |
| 8.2684 | 8.7772 | 18.188 | 3.0584 | 0.29411 | 619.32 |
| 1.9009 | 14.27 | 1.6141 | 2.832 | 0.36473 | 620.79 |
| 3.3957 | 1.4439 | 18.357 | 1.6152 | 0.38914 | 619.63 |
| 5.3122 | 6.106 | 22.259 | 2.5319 | 0.62842 | 619.4 |
| 2 | 19.801 | 40.672 | 2.8287 | 0.54307 | 618.98 |
| 5 | 7.8044 | 38.054 | 1.62 | 0.50912 | 619.08 |



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| 5.2766 | 2.1367 | 47.309 | 1.2865 | 0.5464 | 619 |
| 3.9903 | 17.698 | 55.296 | 1.1104 | 0.20297 | 618.83 |
| 10.216 | 16.23 | 55.99 | 2.5933 | 0.41134 | 618.84 |
| 7.5686 | 16.457 | 5.0641 | 2.1206 | 0.52684 | 619.66 |
| 2.6186 | 22.153 | 32.962 | 1.9432 | 0.25524 | 619.02 |
| 7.4317 | 4.7287 | 3.0126 | 2.6913 | 0.36339 | 620.32 |
| 1.1628 | 16.917 | 49.829 | 1.4235 | 0.55444 | 618.94 |
| 8.8452 | 10.043 | 19.814 | 1.6174 | 0.20278 | 619.19 |
| 0.81854 | 17.561 | 14.872 | 2.5567 | 0.21845 | 619.54 |
| 4.7528 | 8.1262 | 16.861 | 1.9564 | 0.42602 | 619.49 |
| 7.713 | 16.504 | 9.0705 | 1.8351 | 0.29931 | 619.44 |
| 1.206 | 9.4687 | 12.277 | 1.4962 | 0.38373 | 619.81 |
| 5.2693 | 22.887 | 52.12 | 2.2243 | 0.36198 | 618.86 |
| 2.5926 | 10.178 | 46.62 | 2.7264 | 0.38433 | 618.98 |
| 6.7954 | 17.192 | 46.542 | 1.0515 | 0.55041 | 618.9 |
| 2.7638 | 19.002 | 16.768 | 1.2687 | 0.52311 | 619.31 |
| 4.7438 | 5.5853 | 7.266 | 2.026 | 0.6744 | 620.19 |
| 8 | 17.199 | 3.2515 | 2.9106 | 0.42363 | 619.67 |
| 93 | 19.932 | 17.402 | 1.6318 | 0.65121 | 619.4 |



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| 7.7925 | 18.361 | 41.154 | 1.565 | 0.59155 | 618.94 |
| 3.7043 | 4.9985 | 39.243 | 1.083 | 0.53116 | 619.08 |
| 9.2441 | 3.253 | 35.967 | 1.0737 | 0.71055 | 619.09 |
| 3.8234 | 20.575 | 12.682 | 2.2198 | 0.45515 | 619.45 |
| 4.8102 | 24.517 | 25.704 | 2.7897 | 0.54464 | 619.15 |
| 10.577 | 18.978 | 17.913 | 1.7077 | 0.66095 | 619.16 |
| 9.3864 | 22.811 | 52.163 | 1.71 | 0.52371 | 618.85 |
| 9.9514 | 15.506 | 47.383 | 1.0318 | 0.79056 | 618.91 |
| 10.387 | 11.886 | 54.146 | 1.8048 | 0.26335 | 618.83 |
| 2.1298 | 1.8634 | 26.175 | 2.8545 | 0.3806 | 619.39 |
| 4.3804 | 15.292 | 46.459 | 0.99582 | 0.42791 | 618.91 |
| 8.1359 | 19.7 | 4.557 | 1.3187 | 0.48363 | 619.45 |
| 7.2265 | 20.588 | 59.912 | 2.7763 | 0.33354 | 618.82 |
| 9.3696 | 6.1597 | 43.012 | 0.96836 | 0.39245 | 618.94 |
| 3.0668 | 18.523 | 16.4 | 1.9714 | 0.33611 | 619.36 |
| 4.0826 | 17.181 | 46.029 | 2.7779 | 0.21305 | 618.92 |
| 3.0553 | 24.323 | 30.018 | 2.9296 | 0.20928 | 619.07 |
| 2 | 10.731 | 54.487 | 2.0606 | 0.67031 | 618.97 |
| 6 | 1.9923 | 20.295 | 2.7936 | 0.21119 | 619.32 |



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| 3.7416 | 8.3953 | 35.152 | 2.1945 | 0.74164 | 619.17 |
| 1.1165 | 8.3829 | 15.516 | 2.6505 | 0.31796 | 619.74 |
| 3.7242 | 12.699 | 8.5786 | 1.6311 | 0.56542 | 619.78 |
| 1.9636 | 2.099 | 15.003 | 1.1778 | 0.51372 | 619.93 |
| 1.5363 | 3.0533 | 22.857 | 2.475 | 0.62404 | 619.59 |
| 6.7728 | 6.5476 | 43.068 | 2.5793 | 0.41192 | 618.99 |
| 0.91268 | 19.724 | 2.6309 | 1.8172 | 0.65534 | 620.14 |
| 9.4712 | 21.819 | 43.108 | 1.706 | 0.50335 | 618.9 |
| 1.4791 | 15.882 | 16.449 | 1.0601 | 0.65946 | 619.42 |
| 5.7765 | 8.8137 | 53.566 | 1.7685 | 0.41752 | 618.9 |
| 2.4695 | 7.3278 | 34.223 | 1.7508 | 0.75501 | 619.22 |
| 5.1377 | 1.5254 | 28.889 | 1.568 | 0.74066 | 619.32 |
| 9.6723 | 21.831 | 9.7111 | 2.9608 | 0.53103 | 619.38 |
| 7.5479 | 6.7554 | 16.136 | 2.3989 | 0.51262 | 619.46 |
| 10.694 | 24.646 | 24.6 | 1.8804 | 0.30741 | 619 |
| 4.8684 | 3.844 | 60.295 | 2.3215 | 0.56535 | 618.91 |
| 5.0346 | 13.674 | 32.56 | 2.2663 | 0.63678 | 619.12 |
| 8 | 9.931 | 7.7311 | 3.1069 | 0.72556 | 619.73 |
| 3 | 19.756 | 57.198 | 2.6292 | 0.48399 | 618.84 |



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| 7.6805 | 22.917 | 28.647 | 2.5288 | 0.65133 | 619.08 |
| 2.5617 | 9.5073 | 56.562 | 2.8863 | 0.30863 | 618.89 |
| 4.0874 | 22.843 | 18.385 | 0.96354 | 0.2128 | 619.12 |
| 3.588 | 3.6387 | 48.93 | 2.2031 | 0.27756 | 618.95 |
| 3.1726 | 1.5946 | 3.683 | 3.0872 | 0.71603 | 621.56 |
| 8.0216 | 22.684 | 13.473 | 2.1193 | 0.67803 | 619.28 |
| 3.9814 | 23.32 | 48.579 | 1.0786 | 0.31256 | 618.85 |
| 10.811 | 15.057 | 43.611 | 2.188 | 0.30273 | 618.89 |
| 9.6658 | 2.1189 | 56.761 | 1.4442 | 0.60534 | 618.9 |
| 7.1713 | 22.142 | 38.133 | 1.9137 | 0.43994 | 618.95 |

