

COMMON 4x4 WORDSQUARES

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In a companion article, the editor estimates the number of m-letter words to be drawn at random from the dictionary in order to have a reasonable expectation of forming an mxm word square. This is a task admirably suited to the computer, which can take a list of words and check all possible combinations for potential squares. To show what can be done, I took the 298 four-letter words in my spell checker and formed a total of 153 4x4 word squares, somewhat more than the editor's prediction of 67. (The editor suggests that the support should be only 84, not the 104 calculated in his article.) In a similar effort, the computer was unable to form a 5x5 word square using 320 words from my spell checker.

able also area arms army away back ball bank base been best bill blue
boat body bond book both boys call came camp card care cars case cash
cent city club code cold come copy cost dark data date days dead deal
deep desk died does dogs done door down drop duty each east easy edge
else even ever eyes face fact fair fall farm fast fear feel fees feet
fell felt file fill film find fine fire firm five food foot form four
free from full fund game gave girl give glad goes gone good gray hair
half hall hand hard have head hear heat held hell help here high hold
home hope hour idea inch into item jack jazz jobs John join June just
keep kept kind king knew know lack lady laid land last late laws lead
left less life like line lips list live loan long look lord loss lost
lots love made mail main make many Mary mass mean meet Mike mind miss
more most move much must name near neck need news next nice nine none
note once only open over page paid pain park part pass past pays pipe
plan play plus poet pool poor post race rate read real rent rest risk
road role room said sale same save says seek seem seen self sell send
sent sets ship shop show side sign size sold some soon sort stay step
stop such sure take talk team tell term test than that them then they
thin this thus time tire told tone took town trip true turn type unit
upon urge used very vice view vote wage wait wall want ways week well
went were west what when whom wide wife will wine wire wish with word
work year York your

| | | |
|---------------------|---------------------|---------------------|
| away were area year | base away sale eyes | call area left late |
| away wire area year | base away same eyes | call area less last |
| ball area lead lady | base away save eyes | came away made eyes |
| ball area left late | bill idea lead lady | came away make eyes |
| ball area less last | bill idea left late | card area rent data |
| base area sets east | bill idea less last | card area rent date |
| base area sets easy | call area lead lady | card area rest data |

| | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|
| card | area | rest | date | hall | area | less | last | plus | line | unit | sets |
| care | away | race | eyes | hand | area | near | dark | race | away | came | eyes |
| care | away | rate | eyes | hand | area | next | data | race | away | care | eyes |
| cars | area | real | sale | hand | area | next | date | race | away | case | eyes |
| case | area | sets | east | hard | area | rent | data | rate | away | take | eyes |
| case | area | sets | easy | hard | area | rent | date | sale | area | less | east |
| case | away | sale | eyes | hard | area | rest | data | sale | area | less | easy |
| case | away | same | eyes | hard | area | rest | date | sale | away | late | eyes |
| case | away | save | eyes | kind | idea | near | dark | same | away | made | eyes |
| cash | area | seen | hand | kind | idea | next | data | same | away | make | eyes |
| cash | area | sell | half | kind | idea | next | date | show | have | over | were |
| cash | area | sell | hall | know | nine | once | week | show | hope | open | went |
| date | away | take | eyes | know | none | once | week | stay | tire | area | year |
| east | area | seek | take | land | area | near | dark | than | here | area | near |
| east | area | sell | talk | land | area | next | data | that | here | area | team |
| face | away | came | eyes | land | area | next | date | that | here | arms | test |
| face | away | care | eyes | last | area | seek | take | thus | here | urge | seek |
| face | away | case | eyes | last | area | sell | talk | thus | here | urge | seem |
| fact | away | camp | type | late | away | take | eyes | thus | here | urge | seen |
| fall | area | lead | lady | laws | area | well | sale | thus | hope | upon | send |
| fall | area | left | late | life | idea | fees | east | thus | hope | upon | sent |
| fall | area | less | last | life | idea | fees | easy | used | sale | else | deep |
| farm | area | read | made | line | idea | news | east | used | side | edge | deep |
| fast | area | seek | take | line | idea | news | easy | wage | away | game | eyes |
| fast | area | sell | talk | list | idea | seek | take | wage | away | gave | eyes |
| file | idea | less | east | list | idea | sell | talk | wall | area | lead | lady |
| file | idea | less | easy | made | away | date | eyes | wall | area | left | late |
| fill | idea | lead | lady | mass | area | seem | same | wall | area | less | last |
| fill | idea | left | late | mass | area | sell | sale | want | area | neck | take |
| fill | idea | less | last | mind | idea | near | dark | what | here | area | team |
| film | idea | lead | made | mind | idea | next | data | what | here | arms | test |
| film | idea | less | mass | mind | idea | next | date | wife | idea | fees | east |
| find | idea | near | dark | miss | idea | seem | same | wife | idea | fees | easy |
| find | idea | next | data | miss | idea | sell | sale | will | idea | lead | lady |
| find | idea | next | date | name | away | made | eyes | will | idea | left | late |
| fine | idea | news | east | name | away | make | eyes | will | idea | less | last |
| fine | idea | news | easy | nine | idea | news | east | wine | idea | news | east |
| firm | idea | read | made | nine | idea | news | easy | wine | idea | news | easy |
| game | away | made | eyes | page | away | game | eyes | wish | idea | seen | hand |
| game | away | make | eyes | page | away | gave | eyes | wish | idea | sell | half |
| girl | idea | read | lady | part | area | real | talk | wish | idea | sell | hall |
| girl | idea | rent | late | pass | area | seem | same | wish | into | step | hope |
| girl | idea | rest | late | past | area | seek | take | wish | into | stop | hope |
| half | area | less | fast | past | area | seek | take | with | idea | tell | half |
| hall | area | lead | lady | past | area | sell | talk | with | idea | tell | hall |
| hall | area | left | late | | | | | | | | |