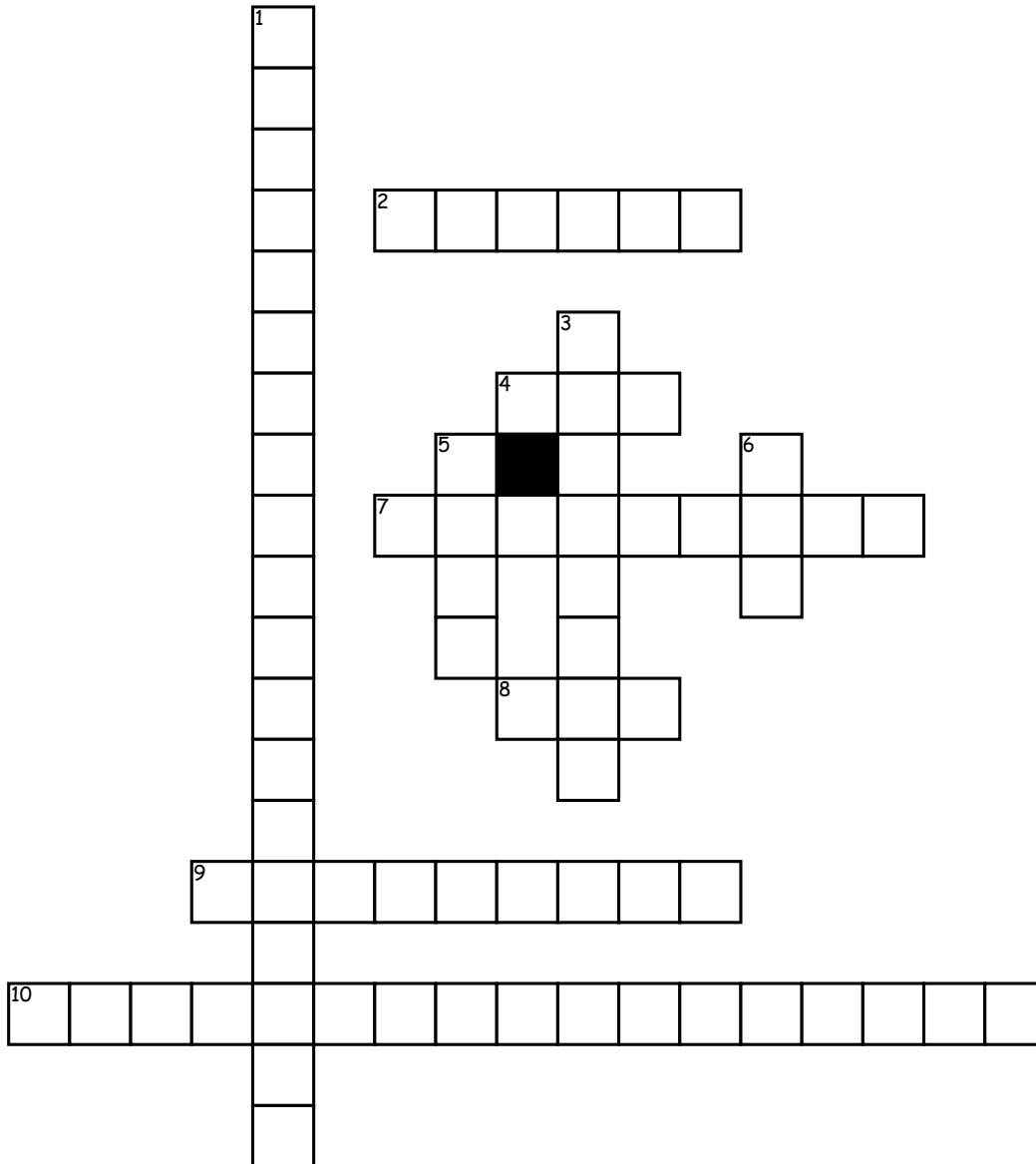


COMBINED VARIATION



Across

- 2. If a varies jointly as b and c and inversely as the square of d, and $a = 120$ when $b = 5$, $c = 2$, and $d = 9$, find a when $b = 12$, $c = 9$ and $d = 9$.
- 4. Given the combined variation equation , find x when $y = 2$ and $z = 10$.
- 7. If y varies directly with x and inversely with z, and $y = 25$ when $x = 10$ and $z = 2$, find y when $x = 18$ and $z = 9$.
- 8. If xx varies directly as yy and inversely as zz , and $x=10x=10$ when $y=5y=5$ and $z=3z=3$, for what value of zz will $x=3x=3$ and $y=4y=4$?
- 9. is a concept that is based more on the concept of ratio.

- 10. describes a situation where a variable on two (or more) other variables

Down

- 1. the number that relates two variables that are directly proportional or inversely proportional to one another.
- 3. If y varies directly with x and inversely with z, and $y = 12$ when $x = 100$ and $z = 25$, find y when $x = 36$ and $z = 12$
- 5. f p varies directly as the square of q and inversely as the square root of r, and $p = 60$ when $q = 6$ and $r = 81$, find p when $q = 8$ and $r = 144$.
- 6. It is given that z varies directly with y and inversely with x. Also, when $x = 24$ and $y = 48$, $z = 4$. Find the value of z when $x = 4$ and $y = 12$