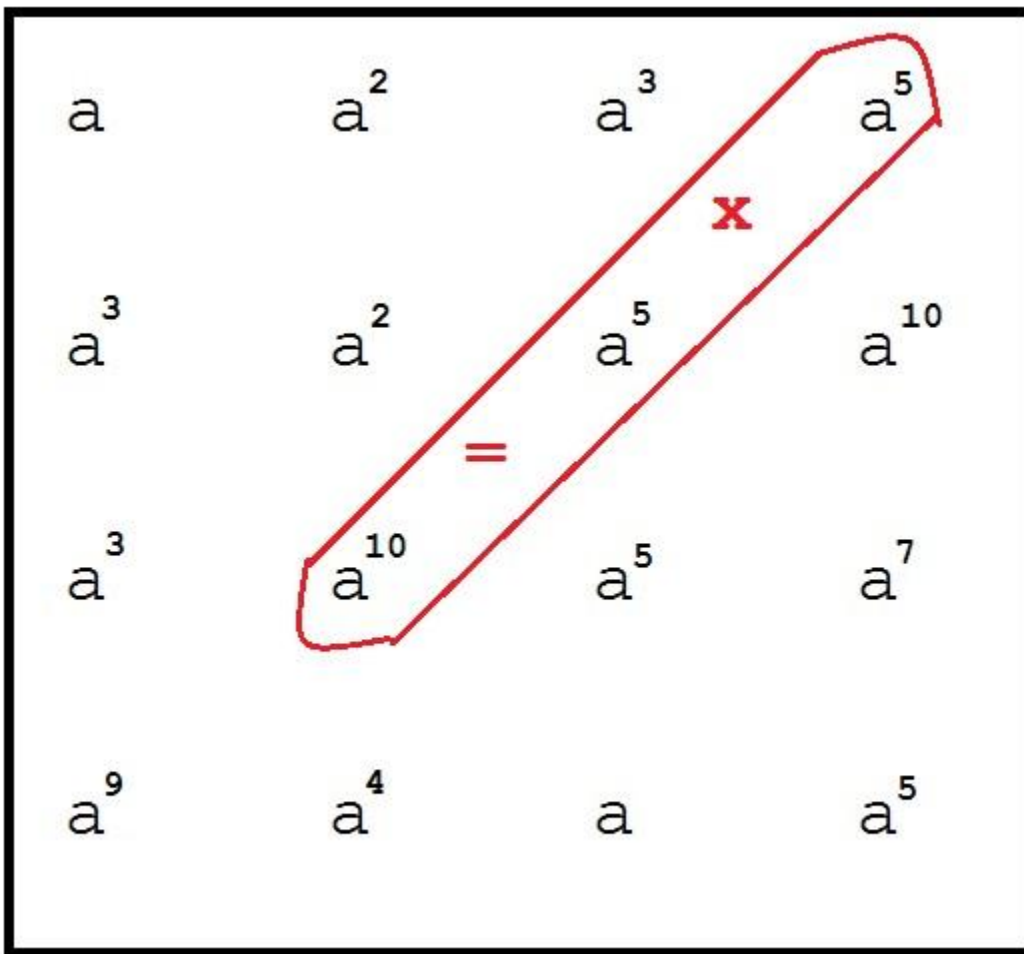


Algebra Puzzles

by David Pleacher

(1) Exponents Puzzle

Construct true sentences in the diagram below by inserting the appropriate operation symbol(s) and the equal sign. The example circled could also have been written $a^{10} / a^5 = a^5$



(2) Cross Polynomial Puzzle

Perform the indicated operations and simplify. Enter the resulting polynomial using one block for the sign and one block for the term.

ACROSS

1. $(m^2 + 2)(m^2 + 1)$

3. $(m + 5)(m - 6)$

5. $4(m + 1)$

6. $-5(m^2 + 3)$

8. $(2m - 5)^2 - 22$

DOWN

2. $(m^3 + m^2)(1 + 2/m - 3/m^2)$

4. $(m + 2)(m - 2) - m^2$

7. $(m - x)(m^2 + mx + x^2) + x^3$

9. $(3 - 2m)(3 + 2m)$

1		2		
3			4	
	5			
9				7
6				
8				