

Our word **algebra** comes from the title of a book written in 825 A. D. by al-Khowarizmi of Baghdad. To find out what algebra means in Arabic, perform the operations indicated below and place the letter of the correct answer on the line beside each rational expression. When you finish, place each letter above its expression number on the lines at the bottom of the page.

_____ 1. $13 + \frac{2}{3x}$

L. $\frac{5}{x+5}$

_____ 2. $\frac{x+6}{4x} + \frac{2x-7}{12x} + \frac{x+1}{12x}$

E. $\frac{x+5}{x^2-2x}$

_____ 3. $\frac{2x-2}{x^2-3x} + \frac{2}{x-3} - \frac{7x-2-x^2}{x^2-3x}$

A. $\frac{4x+1}{x+3}$

_____ 4. $\frac{5}{2x+10} + \frac{7}{3x+15} + \frac{1}{6x+30}$

H. $\frac{39x+2}{3x}$

_____ 5. $\frac{1}{x+2} + \frac{1}{x-2}$

N. $x+1$

_____ 6. $\frac{x}{x+2} + \frac{x}{x-2}$

I. 0

_____ 7. $\frac{7}{2x-4} - \frac{5}{2x}$

G. $\frac{1}{x-7}$

_____ 8. $\frac{4x}{4x+8} - \frac{x}{x+2}$

J. $\frac{x+2}{2x}$

_____ 9. $\frac{6x+3}{3x+9} + \frac{12x}{7x+21} + \frac{2x}{7x+21}$

T. $\frac{x-2}{x}$

_____ 10. $\frac{5x+5}{x^2-6x-7} - \frac{4}{x-7}$

B. $\frac{2x}{x^2-4}$

_____ 11. $\frac{5}{2} - \frac{3x+4}{2x}$

O. 1

_____ 12. $x + \frac{9}{x+9} + \frac{x}{x+9}$

R. $\frac{2x^2}{x^2-4}$

" 9 4 2 9 5 6 " = 5 6 8 12 10 8 12 10
11 3 10 7 11 1 7 6