What Is an Algebra Teacher's Favorite Breakfast?

Simplify the expression. Look for the letter of the answer in the string of letters near the bottom of the page and cross it out each time it appears. Then write the remaining letters in the space at the bottom of the page.

1 $\dfrac{x^2-49}{6x^3}\cdot\dfrac{8x^2}{x^2+7x}$

2 $\dfrac{x-4}{x^3+4x^2}\cdot\dfrac{9x^2+36x}{4-x}$

3 $\dfrac{2x^2-200}{4x^2-40x}\cdot\dfrac{7x+21}{x^2+7x-30}$

4 $\dfrac{6x^5}{x^2-11x+18}\div\dfrac{15x^2}{x^2+7x-18}$

5 $\dfrac{25-x^2}{5x^4}\div\dfrac{x-5}{x^4+5x^3}$

6 $\dfrac{x^2-5x-24}{8x^2+8x}\div\left(x^2+6x+9\right)$

7 $\dfrac{a^2-b^2}{ab^3}\cdot\dfrac{a^4b^2}{a^2b-ab^2}$

8 $\dfrac{a^2-9ab+20b^2}{a^2+8ab+7b^2}\cdot\dfrac{a+7b}{a^2-8ab+16b^2}$

9 $\dfrac{10+3a-a^2}{60b}\cdot\dfrac{75b^5}{5a^2b+10ab}$

10 $\dfrac{a^2-ab-12b^2}{12}\div\dfrac{2a^2+7ab+3b^2}{16a+8b}$

11 $\dfrac{2b-9a}{81a^2-4b^2}\div\dfrac{1}{9a+b}$

12 $\dfrac{a^4-b^4}{a^4+a^2b^2}\div\dfrac{a^2+2ab+b^2}{a^3}$

Answers 1–6

U $\dfrac{7(x+3)}{2x(x-3)}$

O $\dfrac{x-8}{8x+3}$

A $-\dfrac{x+5}{x-5}$

F $\dfrac{2x^3(x+9)}{5(x-9)}$

J $\dfrac{4(x-7)}{3x^2}$

D $\dfrac{7(x-3)}{4x(x+3)}$

R $\dfrac{x-8}{8(x+1)(x+3)}$

L $-\dfrac{9}{x}$

C $\dfrac{2x^2(x-9)}{5(x+9)}$

P $-\dfrac{(x+5)^2}{5x}$

Answers 7–12

B $-\dfrac{9a+b}{a+b}$

G $\dfrac{a-5b}{(a+b)(a-4b)}$

S $\dfrac{2(a-4b)}{3}$

C $-\dfrac{b^2(a-5)}{2a^2}$

T $\dfrac{a(a-b)}{a+b}$

H $\dfrac{a^2(a+b)}{b^2}$

N $\dfrac{a^5(a+b)}{b}$

E $-\dfrac{9a+b}{9a+2b}$

I $-\dfrac{b^3(a-5)}{4a}$

X $\dfrac{a-b}{(a+b)^2}$

S T B U H E A T L C R O F T E N A T J N U P E D I X R G G S

answer to puzzle: