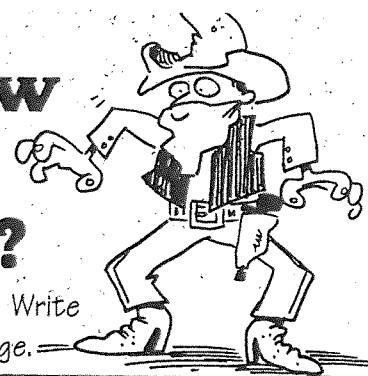


What Happened to the Outlaw Who Wore a Paper Shirt, Paper Vest, and Paper Pants?



Factor the expression completely. Notice the two letters next to your answer. Write these letters in the boxes above the exercise number at the bottom of the page.

1. $a^2 + 7ab - 18b^2$

2. $5a^2 + 55ab + 150b^2$

3. $8a^3 - 98ab^2$

4. $3a^3b - 14a^2b^2 + 8ab^3$

5. $70a^2 + 21ab - 7b^2$

6. $9a^4 + 11a^3b + 2a^2b^2$

7. $3x^2y - 30xy^2 + 72y^3$

8. $9x^2y^2 + 24xy^3 + 16y^4$

9. $10x^4 - 5x^3y - 75x^2y^2$

10. $x^4y^2 + 13x^3y^3 + 22x^2y^4$

11. $7x^4 - 6x^2y^2 - y^4$

12. $x^4 - 2x^2y^2 + y^4$

Answers 1-6

T E $ab(3a - 2b)(a - 4b)$

L O $5(a + 3b)(a + 10b)$

O R $(a + 9b)(a - 2b)$

R R $a^2(9a + 2b)(a + b)$

E D $2a(2a - 7b)^2$

A F $ab(3a - 8b)(a - b)$

W A $5(a + 5b)(a + 6b)$

S T $7(5a - b)(2a + b)$

N D $a^2(3a + 2b)(3a + b)$

N G $2a(2a + 7b)(2a - 7b)$

T H $7(10a - b)(a + b)$

Answers 7-12

I T $3y(x - 3y)(x - 8y)$

E S $(7x^2 + y^2)(x + y)(x - y)$

F A $(x^2 + y^2)(x + y)(x - y)$

D F $y^2(3x + 4y)^2$

L K $5x^2(2x - 5y)(x + 3y)$

L I $x^2y^2(x + 2y)(x + 11y)$

R U $(x + y)^2(x - y)^2$

L L $y^2(3x + 4y)(3x - 4y)$

H E $3y(x - 4y)(x - 6y)$

R O $x^2y^2(x + 11y)(x - 2y)$

S A $5x^2(2x + 5y)(x - 3y)$

7

2

9

6

11

4

8

1

12

5

10

3

What Do You Call It When Somebody Spends The Whole Day Making Pottery?

Solve the equation (check each solution in the original equation). Find your answer below and cross out the letters above it. When you finish, the letters that remain will answer the title question.

1. $\frac{4}{x+2} + \frac{3}{x+5} = \frac{5}{x^2 + 7x + 10}$

2. $y + \frac{6}{y} = 5$

3. $\frac{7}{n+4} - \frac{2}{n-3} = \frac{2n-9}{n^2 + n - 12}$

4. $\frac{a}{a+5} = \frac{3}{a+1}$

5. $\frac{4d}{d+3} + d = \frac{8}{d+3}$

6. $\frac{3}{m-1} = \frac{2m}{m+4}$

7. $\frac{5}{u+2} + \frac{u}{u-2} = \frac{8}{u^2 - 4}$

8. $\frac{t+2}{t-1} + \frac{4}{t-5} = \frac{6}{t^2 - 6t + 5}$

9. $2 = \frac{x}{x+3} - \frac{3}{x-5}$

10. $\frac{2}{p} + 3 = \frac{7}{p+6}$

TH 2, 3	AT 1, -8	KI -2, -5	SS 3, -7	SP 5, -3	LN 2, 6	OT -9
IN $4, -\frac{3}{2}$	TI -6	RE 4, -5	ST -3	SO $-3, -\frac{4}{3}$	ME 4, -7	SS $\frac{20}{3}$