

What Do You Call a Message

Printed on a Lion With Chickenpox ?



Express each product in simplest form. Find your answer below and notice the letter next to it. Write this letter in each box containing the number of that exercise.

$$\textcircled{1} \frac{x^3}{2y^2} \cdot \frac{6y^4}{xy}$$

$$\textcircled{6} \frac{13xy^2}{x^2 + 3x - 18} \cdot \frac{x^2 - 9}{26x^4y^2}$$

$$\textcircled{2} \frac{5xy^2}{4x^2} \cdot \frac{8x^3y}{15y^5}$$

$$\textcircled{7} \frac{25 - x^2}{14x^3y^8} \cdot \frac{7x^2y}{8x + 40}$$

$$\textcircled{3} \frac{x^2 + 7x + 12}{x - 5} \cdot \frac{2x - 10}{x + 3}$$

$$\textcircled{8} \frac{2x^2 + 5x - 7}{x + 4} \cdot \frac{x^2 + 4x}{x^2 - 2x + 1}$$

$$\textcircled{4} \frac{x^2 - 3x - 10}{x + 7} \cdot \frac{3x + 21}{6x - 30}$$

$$\textcircled{9} \frac{2x + 10}{32 - 8x} \cdot \frac{x^2 - 10x + 24}{x^2 - x - 30}$$

$$\textcircled{5} \frac{x - 1}{4xy^3} \cdot \frac{6x^2y}{1 - x}$$

$$\textcircled{10} \frac{12x + 48}{6x - 15} \cdot \frac{4x^2 - 25}{x^2 + 9x + 20}$$

$$\textcircled{G} -\frac{3x}{2y^2}$$

$$\textcircled{O} \frac{4(2x + 5)}{x + 5}$$

$$\textcircled{L} \frac{x + 3}{2x^3(x + 6)}$$

$$\textcircled{F} -\frac{x - 4}{x + 4}$$

$$\textcircled{H} 3x^2y$$

$$\textcircled{T} -\frac{1}{4}$$

$$\textcircled{D} \frac{2x^2}{3y^2}$$

$$\textcircled{I} \frac{x + 2}{2}$$

$$\textcircled{E} 2(x + 4)$$

$$\textcircled{N} \frac{x(2x + 7)}{x - 1}$$

$$\textcircled{S} -\frac{x - 5}{16xy^7}$$

$$\textcircled{A} \frac{4(2x - 5)}{3(x + 4)}$$

7	4	5	8	10	8	9	1	3	2	10	9	9	3	2	6	4	10	8
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Why Are Ancient Stories Like Feet?

Express each product below in simplest form. Find your answer in the answer column and notice the two letters next to it. Write these letters in the two boxes at the bottom of the page that contain the number of that exercise.

$$① \frac{a^2 - b^2}{a^4 b} \cdot \frac{ab^2}{3a + 3b}$$

$$② \frac{4 - a}{5a} \cdot \frac{a^2 + 5a}{a^2 + a - 20}$$

$$③ \frac{a^2 + 5ab + 6b^2}{a^2 - 5ab + 6b^2} \cdot \frac{10a - 30b}{5a + 10b}$$

$$④ \frac{3a^2 b - ab^2}{6a} \cdot \frac{9a^2}{9a^2 - b^2}$$

$$⑤ \frac{2a^2 - 13a + 15}{8a^2 - 12a} \cdot \frac{6a - 4a^2}{a^2 - 10a + 25}$$

$$⑥ \frac{-a^3 + ab^2}{a^2} \cdot \frac{a^3 + 7a^2 b}{a^2 + 6ab - 7b^2}$$

$$⑦ \frac{6a + 24}{2a^2 + 5a - 12} \cdot \frac{4a^2 - 9}{15a^2}$$

$$⑧ \frac{8a - 40}{40 - 3a - a^2} \cdot \frac{a - 8}{2a^2 - 8a}$$

$$⑨ \frac{27a^4 b^7}{3a^2 - 6a + 3} \cdot \frac{(a - 1)^3}{9ab^3}$$

$$\textcircled{\text{ES}} \quad 3a^3 b(a - 1)$$

$$\textcircled{\text{OT}} \quad -a(a + b)$$

$$\textcircled{\text{EG}} \quad a^3 b^4(a - 1)$$

$$\textcircled{\text{HL}} \quad \frac{3a^2 b}{2(3a + b)}$$

$$\textcircled{\text{EB}} \quad \frac{b(a - b)}{3a^3}$$

$$\textcircled{\text{TS}} \quad -\frac{4(a - 8)}{4a - 8}$$

$$\textcircled{\text{DS}} \quad -\frac{4(a - 8)}{a(a + 8)(a - 4)}$$

$$\textcircled{\text{TH}} \quad \frac{2(a + 3b)}{a - 2b}$$

$$\textcircled{\text{AR}} \quad \frac{2(2a + 3)}{5a^2}$$

$$\textcircled{\text{EN}} \quad -\frac{1}{5}$$

$$\textcircled{\text{EY}} \quad -\frac{2a - 3}{2(a - 5)}$$

3	3	5	5	7	7	1	1	6	6	4	4	9	9	2	2	8	8
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What Happened to the Peanut Who Went Walking Late at Night?

Express each quotient below in simplest form. Find your answer in the answer column and notice the letter next to it. Write this letter in each box containing the number of that exercise.

① $\frac{12m^2n^5}{m+5} \div \frac{3m^3n}{m^2-25}$

② $\frac{n^2-9n+20}{6m^7n^2} \div \frac{5n-20}{10mn^2}$

③ $\frac{m^2}{m^2-7m} \div \frac{1}{m^2-4m-21}$

④ $\frac{16-2m}{m^2+2m-24} \div \frac{m-8}{3m+18}$

⑤ $\frac{12n-36}{9-n^2} \div \frac{8n^5}{n^2+3n}$

⑥ $\frac{m^2-n^2}{m^2+2mn+n^2} \div \frac{m^2n-mn^2}{7m^2}$

⑦ $\frac{n^2-n-12}{2n^2-15n+18} \div \frac{3n^2-12n}{2n^3-9n^2}$

⑧ $\frac{17mn^3}{m^2+2m-35} \div \frac{34m^8n^4}{m^2+7m}$

⑨ $\frac{4n^3-25n}{3n^2-16n+5} \div (10n+25)$

Ⓜ $7m(m-n)$

Ⓝ $-3n^4(n-3)$

Ⓣ $m(m+3)$

ⓓ $-\frac{3}{2n^4}$

Ⓤ $\frac{4n^4(m-5)}{m}$

Ⓡ $\frac{1}{2m^4n(m-7)}$

Ⓢ $\frac{n(2n-9)(n+3)}{3(2n-3)(n-6)}$

Ⓛ $-\frac{6}{m-4}$

Ⓐ $\frac{n(2n-5)}{5(3n-1)(n-5)}$

Ⓦ $\frac{7m}{n(m+n)}$

Ⓛ $\frac{1}{2m^6n(m-5)}$

Ⓔ $\frac{n-5}{3m^6}$

4	3	6	9	7	9	7	7	9	1	8	3	2	5
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What Happens When the Smog Lifts in Los Angeles, California ?

Simplify each expression below and find your answer at the bottom of the page. Cross out the letter above each correct answer. When you finish, the answer to the title question will remain.

① $\frac{9x}{x^2 - 25} \cdot \frac{x^2 + 5x}{2x - 4} \cdot \frac{x^2 + 3x - 10}{3x^4}$

② $\frac{x + 4}{2x^2 - 14x} \cdot \frac{x^3 + 4x^2}{3x - 24} \div \frac{x^2 + 8x + 16}{x^2 - 3x - 28}$

③ $\frac{4x^2 - y^2}{x^2y - xy^2} \cdot \frac{x^2 + xy}{8x + 4y} \div \frac{2x^2 - 7xy + 3y^2}{8x^5y}$

④ $\frac{(2x - 5)^3}{3 - x} \div \frac{2x^2 - 3x - 5}{6x^2 + 15x} \cdot \frac{x^2 - 2x - 3}{4x^2 - 25}$

⑤ $\frac{x^4 - y^4}{3x^2y - 3xy^2} \div \frac{x^2 + 2xy + y^2}{9xy^3} \div \frac{4x^2 + 4y^2}{xy^2 + y^3}$

⑥ $(75x^2 - 12) \div \left(\frac{35 - 2x - x^2}{x^2 + 7x} \div \frac{x - 5}{5x^3 + 2x^2} \right)$



A	B	U	S	C	O	L	R	A	Y
$\frac{x(x+4)}{6(x-8)}$	$-\frac{3(5x-2)}{x}$	$\frac{2x^3(x+y)}{x-3y}$	$-3x(2x-5)$	$\frac{3y^3(x+y)}{4(x-y)}$	$\frac{3y^4}{4}$	$-3(2x-5)$	$\frac{3(x+5)}{2x^2(x-5)}$	$\frac{x(x+4)}{3(x-7)}$	$\frac{2x^5(x+y)}{(x-y)(x-3y)}$