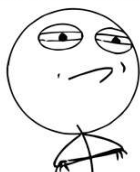


CHALLENGE ACCEPTED

Take the Challenge



1. $4(5x^2 - 2x + 3) - 5(2x^2 - 3) + 3(7x + 2) - (4x - 1)$

2. $(7ab - 3b)(-4b) \rightarrow -4b(7ab - 3b)$

3.
$$\frac{81x^2y^2 - 9xy + 36x^2y}{9xy}$$

4. $(12x^2y - 30y^2 + 15y) \div (3y)$

$$\begin{aligned} 1. \quad & 4(5x^2 - 2x + 3) - 5(2x^2 - 3) + 3(7x + 2) - (4x - 1) \\ & = 20x^2 - 8x + 12 - 10x^2 + 15 + 21x + 6 - 4x + 1 \\ & = \textcircled{20x^2} - \textcircled{8x} + \textcircled{12} - \textcircled{10x^2} + \textcircled{15} + \textcircled{21x} + \textcircled{6} - \textcircled{4x} + \textcircled{1} \\ & = 10x^2 + 9x + 34 \end{aligned}$$

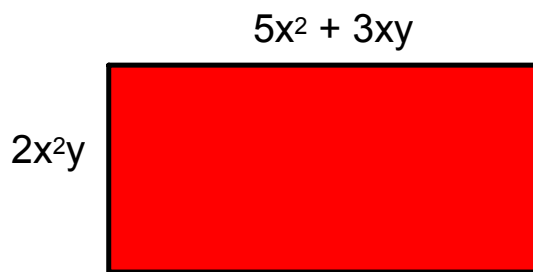
$$\begin{aligned} 2. \quad & (7ab - 3b)(-4b) \\ & = -28ab^2 + 12b^2 \end{aligned}$$

$$\begin{aligned} & -4b^1 (7a^1b^1 - 3b^1) \\ & -28a^1b^2 + 12b^2 \end{aligned}$$

$$\begin{aligned} 3. \quad & \frac{81x^2y^2 - 9xy + 36x^2y}{9xy} \\ &= \frac{81x^2y^2}{9xy} - \frac{9xy}{9xy} + \frac{36x^2y}{9xy} \\ &= 9xy - 1 + 4x \end{aligned}$$

$$\begin{aligned} 4. \quad & (12x^2y - 30y^2 + 15y) \div (3y) \\ &= \frac{12x^2y}{3y} - \frac{30y^2}{3y} + \frac{15y}{3y} \\ &= 4x^2 - 10y + 5 \end{aligned}$$

Find the Area and Perimeter:



Area

$$2x^2y(5x^2 + 3xy)$$

$$= 10x^4y + 6x^3y^2$$

Perimeter

$$2x^2y + 2x^2y + 5x^2 + 3xy + 5x^2 + 3xy$$

$$= 4x^2y + 10x^2 + 6xy$$

$$2(2x^2y) + 2(5x^2 + 3xy)$$

$$4x^2y + 10x^2 + 6xy$$

