

Adding/Subtracting terms with Exponents

Ex: $-15a^3bc + 6a^3bc$

apples

apples

match! these are like terms ☺

$$-15 + 6 = -9$$

$-9a^3bc$

apples

Ex: $3y + 9z + 4y - 3z$

$$7y + 6z$$

$7y + 6z$

Ex: $10m^2n + 7mn^2 - m^2n$

$$10 - 1 = 9$$

~~10~~ $9m^2n$

$9m^2n + 7mn^2$

EX: $\frac{2}{5}cd^2 - \frac{1}{3}cd^2$

match!

$$\frac{2}{5} - \frac{1}{3}$$

$$\frac{2 \cdot 3}{5 \cdot 3} - \frac{1 \cdot 5}{3 \cdot 5} = \frac{6}{15} - \frac{5}{15} = \frac{1}{15}$$

$$\boxed{\frac{1}{15}cd^2}$$

EX: $(2x^5y^2)(4xy^3) + (x^4y^4)(3x^2y)$

① use rules first (wherever terms are multiplied).

$$\underline{8x^6y^5}$$

+

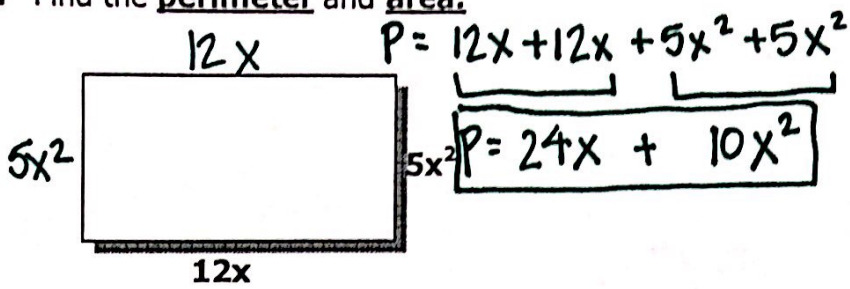
$$\underline{3x^6y^5}$$

$$8+3 = 11$$

$$\boxed{11x^6y^5}$$

Geometric Applications

1. Find the perimeter and area:

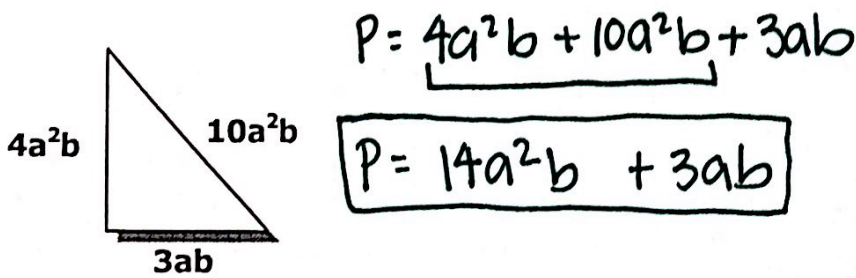


$$A = L \cdot W$$

$$A = (12x)(5x^2)$$

$$A = 60x^3$$

2. Find the perimeter and area:

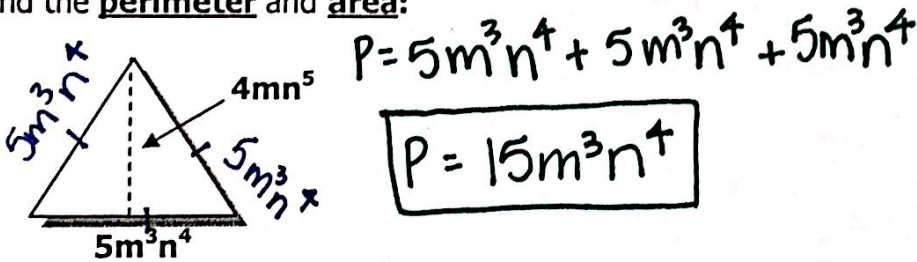


$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(3ab)(4a^2b)$$

$$A = 6a^3b^2$$

3. Find the perimeter and area:

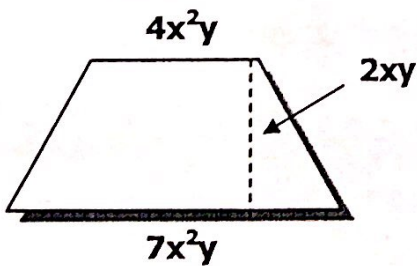


$$A = \frac{1}{2}bh$$

$$A = (5m^3n^4)(4mn^5) \cdot \frac{1}{2}$$

$$A = 10m^4n^9$$

4. Find the area:



5. Find the area:

