Warm Up **4/12/19**

Think about these, then try the half sheet from the stool...

What are the equations for:

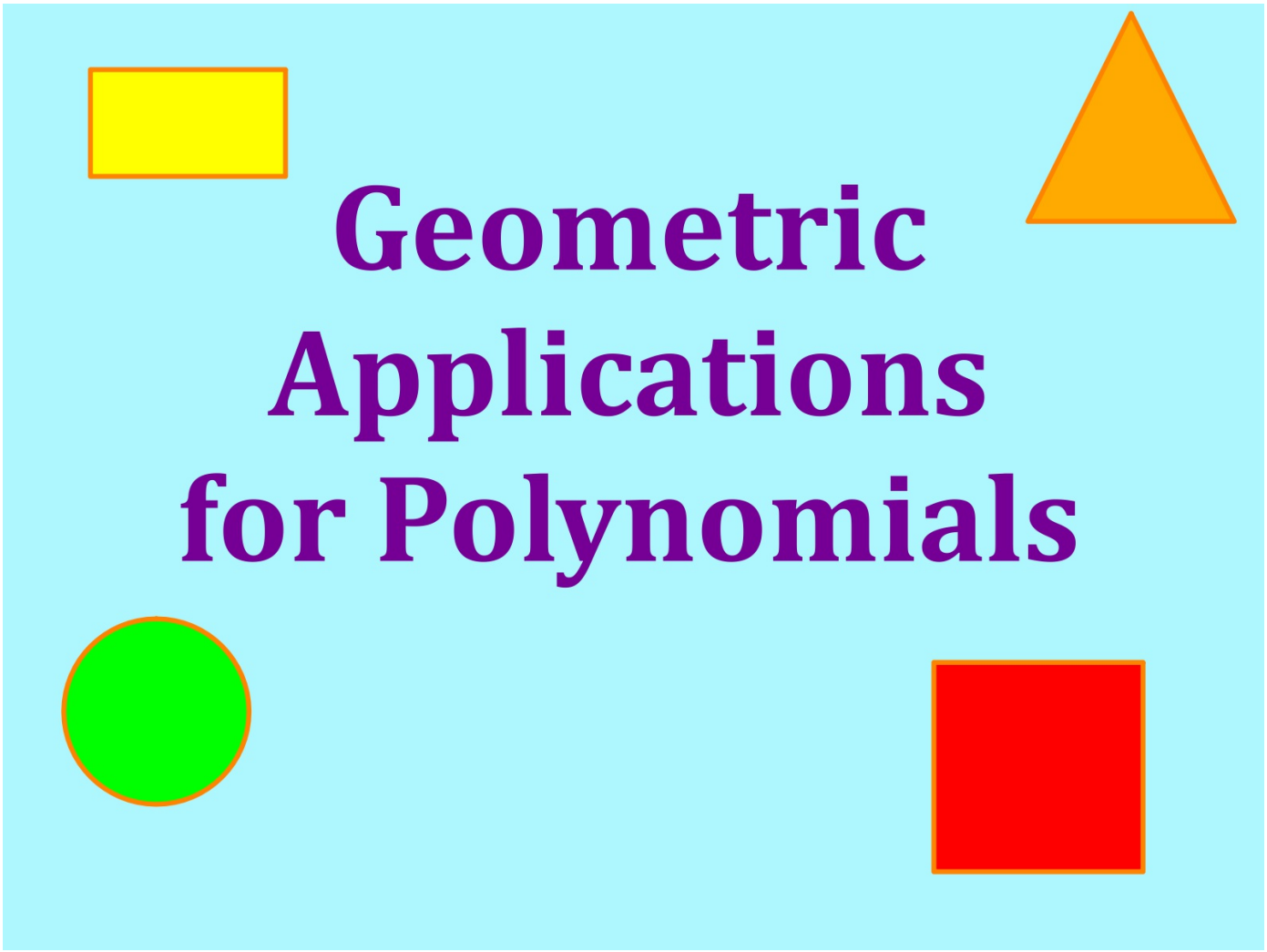
A. Area of a rectangle $A = \ell w$

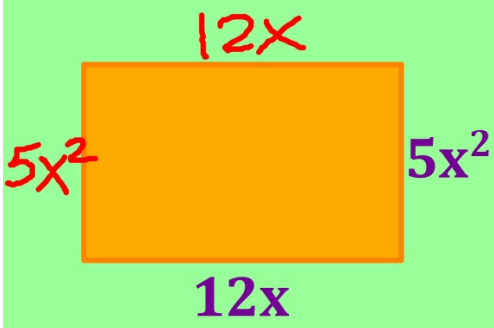
B. Area of a triangle $A = \frac{bh}{2}$

C. Area of trapezoid $A = \frac{h(b_1 + b_2)}{2}$

D. Area of a circle

$A = \pi r^2$


Geometric
Applications
for Polynomials



Perimeter:

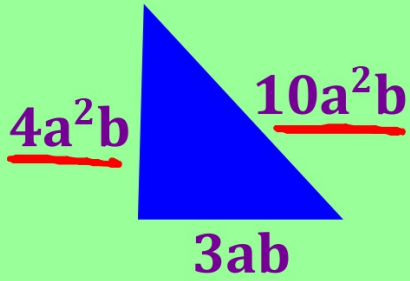
$P = 10x^2 + 24x$

Area:

$A = \ell w$

$12x(5x^2)$

$A = 60x^3$



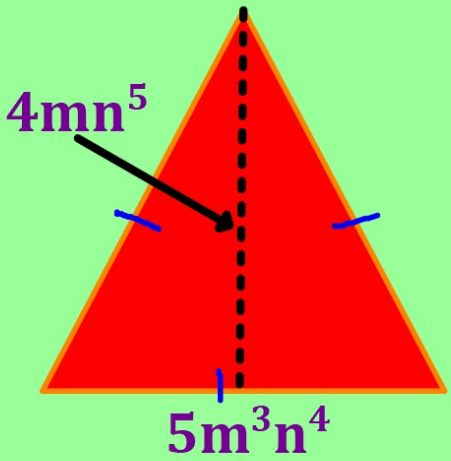
Perimeter:

$$P = 14a^2b + 3ab$$

Area:

$$A = \frac{3ab(4a^2b)}{2} = \frac{12a^3b^2}{2}$$

$$\boxed{A = 6a^3b^2}$$



Perimeter:

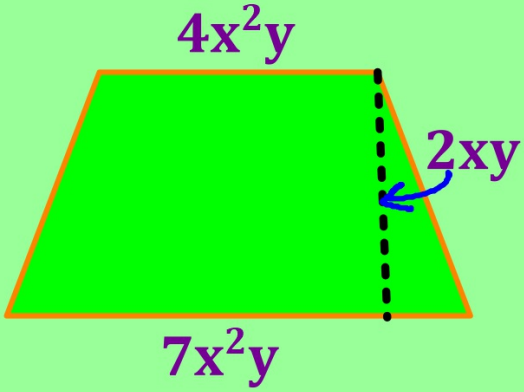
$$P = 3(5m^3n^4)$$

$$\boxed{P = 15m^3n^4}$$

Area:

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

$$\frac{20m^4n^9}{2} = \boxed{10m^4n^9}$$



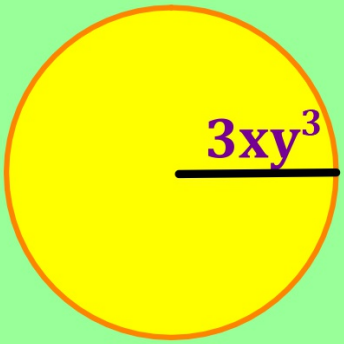
Area:

$$A = \frac{h(b_1+b_2)}{2}$$

$$A = \frac{2xy(11x^2y)}{2}$$

$$\frac{22x^3y^2}{2}$$

$$A = 11x^3y^2$$



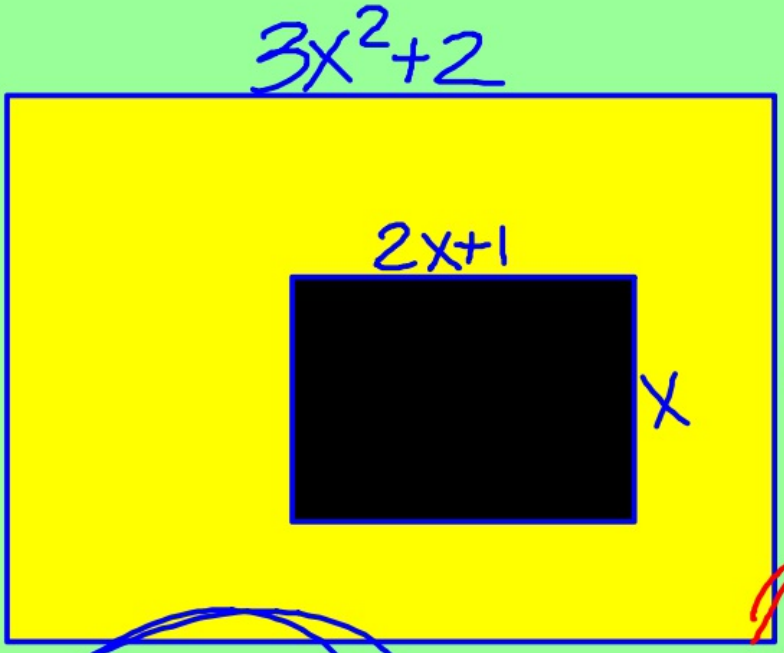
Area:

$A = \pi r^2$

$A = \pi (3xy^3)^2$

$A = \pi (9x^2y^6)$

$A = 9x^2y^6\pi$



$(3x^2+2)(6x^2+5)$

$18x^4+15x^2+12x^2+10$

$x(2x+1)$

$2x^2+x$

$(18x^4+27x^2+10)-(2x^2+x)$

$18x^4+27x^2+10-2x^2-x$

$$18x^4+25x^2-x+10$$

$16x^4y^2$

$(4x^2y)^2$

$(4x^2y)(4x^2y)$

$16x^4y^2$

$(4x^2+y)^2$

$(4x^2+y)(4x^2+y)$

	$4x^2$	$+\ y$
$4x^2$	$16x^4$	$4x^2y$
$+y$	$4x^2y$	y^2

$16x^4+8x^2y+y^2$

$$(4x^2y)^5 = 1024x^{10}y^5$$

$$(4x^2y)(4x^2y)(4x^2y)(4x^2y)(4x^2y)$$

$$1024x^{10}y^5$$