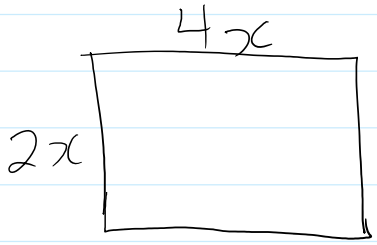
Multiplying and Dividing Monomials

Thursday, October 17, 2019 8:58 AM

Monomials: $3, x, 4x, 7x^2, 2x^2y^3 \ldots$



$A = l \cdot w$ (length × width)

$A = 4x \cdot 2x$

$A = 4 \cdot 2 \cdot x \cdot x$

$A = 8x^2$

$(-3x)(4x^2) = (-3 \cdot 4)(x \cdot x^2)$

$= -12x^3$

$(-4)(-2x) = 8x$

Try: ① $(-7x)(4x)$ ② $(-8x^2)(-4x)$

$= -28x^2$ $= 32x^3$

$16x^2 \div 4x \Rightarrow \frac{16x^2}{4x} = 4x$

$\frac{-27x^2}{9x^2} = -3$

$\frac{12x^3}{15x^2} = \frac{4x}{5}$ or $\frac{4}{5}x$

Try ① $\frac{20x^2}{-4x}$

$= -5x$

② $\frac{24x^3}{16x^5}$ $\frac{x \cdot x \cdot x}{x \cdot x \cdot x \cdot (x \cdot x)}$

3

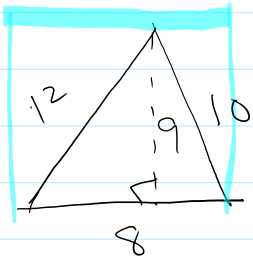
$= -5x$

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

$$\frac{(-3x)(-4x^2)}{(-6x)} = \frac{12x^3}{-6x} = -2x^2$$

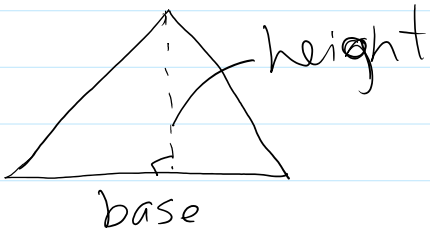
Triangle

$$\text{Area} = \frac{\text{base} \cdot \text{height}}{2}$$

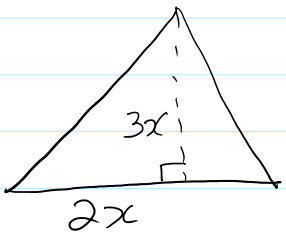


$$A = \frac{bh}{2} \quad \text{or} \quad A = \frac{1}{2}bh$$

$$A = \frac{8 \times 9}{2} = \frac{72}{2} = 36$$



Find the area of

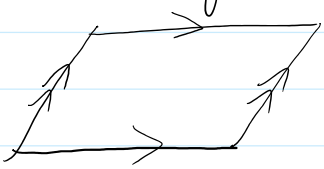


$$A = \frac{bh}{2}$$

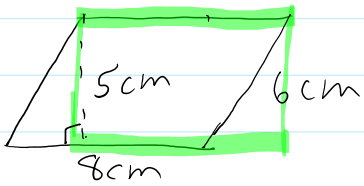
$$A = \frac{2x \cdot 3x}{2}$$

$$= \frac{6x^2}{2} = 3x^2$$

Parallelogram



trapezoid



Area = base · height
= 8 x 5
= 40 cm^2