

Algebra Skills Practice

Name

Date

Period

1) Solve for x: $-2(x - 4) = 12$

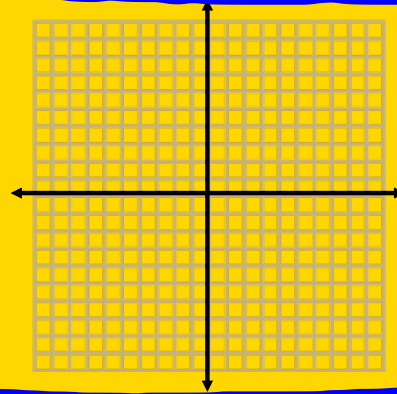
2) Evaluate when $a = 2$, $b = -2$

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

$$3a^2b - 1$$

PEMDAS

3) Graph $3x - y = 4$



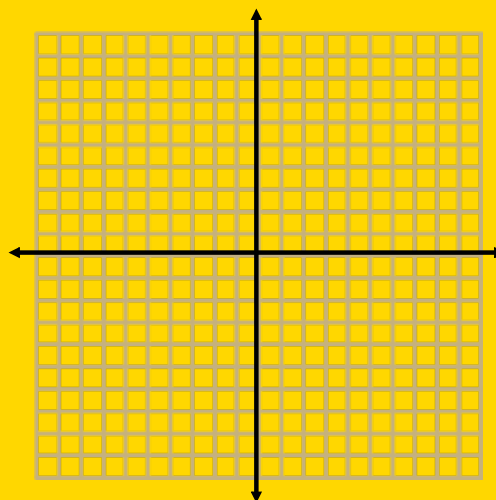
4) Find the y-intercept of the line

$$2x + 5y = -10$$

5) Make a table of values and graph

$$y = -2x + 3$$

x	y
2	
1	
0	
-1	



EXPONENT RULES

$$a^m \cdot a^n = a^{m+n}$$

$$(a^m)^n = a^{mn}$$

$$* (a \cdot b)^m = a^m \cdot b^m$$

$$a^0 = 1$$

$$a^{-m} = \frac{1}{a^m}$$

$$\frac{a^m}{a^n} = a^{m-n}$$

$$* \left(\frac{a}{b} \right)^m = \frac{a^m}{b^m}$$

RATIONAL EXPONENT RULES

$$a^{1/n} = \sqrt[n]{a}$$

$$a^{-1/n} = \frac{1}{a^{1/n}}$$

$$a^{m/n} = (a^{1/n})^m$$

$$a^{-m/n} = \frac{1}{(a^{1/n})^m}$$

$$9^{1/2} = \sqrt[2]{9} = \boxed{\begin{array}{c} +3 \\ -3 \end{array}}$$

$$9^{3/2} = (9^{1/2})^3 = 3^3 = 27$$

$$9^{-3/2} = \frac{1}{9^{3/2}} = \frac{1}{(9^{1/2})^3} = \frac{1}{3^3} = \frac{1}{27}$$