3-10-2016

NEED TO KNOW:

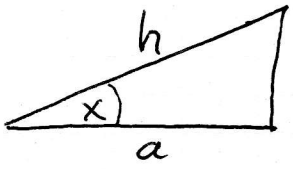
PEMDAS

INVERTING

FUNCTIONS & INVERSES

+	−
×	÷
sin	$\sin^{-1}$
cos	$\cos^{-1}$
tan	$\tan^{-1}$
y^x	$\sqrt[x]{y}$
$B^{p/r}$	$B^{r/p}$
10^x	LOG (log)
e^x	LN (ln)

SOH CAH TOA



{ (GIVEN)

$\sin x = \frac{o}{h}$

$\cos x = \frac{a}{h}$

$\tan x = \frac{o}{a}$

EXPONENTIAL NUMBER OPERATIONS

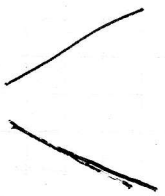
EE

LINES

$y = ax + b$ ← Y-INTERCEPT

↑ SLOPE = $\frac{\text{RISE}}{\text{RUN}}$

SLOPE + −



QUADRATICS (PARABOLAS)

$y = ax^2 + bx + c$

↑ CURVATURE ↑ Y-INTERCEPT

CURVATURE + ⌣

− ⌢

GRAPHS AND THEIR EQUATIONS

ON WEBSITE

QUADRATIC FORMULA

$ax^2 + bx + c = 0$ $\qquad x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

SOLVING FOR X (EXPONENTIAL FORMS YOU MAY SEE)

X IS A FACTOR:

$$x \cdot 10^3 = 4000$$

$$\frac{x \cdot 10^3}{10^3} = \frac{4000}{10^3} \leftarrow$$

$$\boxed{x = 4}$$

X IS THE BASE

$$10x^4 = 160$$

2nd → 4

$$10 \cdot x^4 = 160$$

1st

$$\frac{10x^4}{10} = \frac{160}{10} \leftarrow$$

$$x^4 = 16$$

$$\sqrt[4]{x^4} = \sqrt[4]{16} \leftarrow$$

$$\boxed{x = 2}$$

ONE OPTION: $\sqrt[x]{y}$

[1] [6] [2nd] [y^x] [4] [=]

X IS THE EXPONENT

$$10^x = 10{,}000$$

$$\log(10^x) = \log(10{,}000) \leftarrow$$

$$\boxed{x = 4}$$