WHY DID PYTHAGORAS PLANT A FLOWER IN A CYLINDRICAL POT AND PLACE IT ON THE TOP SHELF, BUT PUT EMPTY CUBICAL POTS ON A LOWER SHELF?

Students All Take Calculus

$S=\frac{o}{h}$ $csc=\frac{h}{o}$ $C=\frac{a}{h}$ $sec=\frac{h}{a}$ $T=\frac{o}{a}$ $cot=\frac{a}{o}$

Find the quadrant in which the angle is located and then sketch a diagram of the angle.
Then find the required trig values and match with a value below.

$-90^0 < \vartheta < 90^0$ (A/C) $\sqrt{3}^2+x^2=2^2$, $3+x^2=4$, $x^2=1$, $x=1$ (you should know this)	$\sin(\vartheta) = \frac{\sqrt{3}}{2}$	1) S $\cos(\vartheta) = \frac{1}{2}$	2) P $\tan(\vartheta) = \frac{\sqrt{3}}{1} = \sqrt{3}$
	3) E $\csc(\vartheta) = \frac{2\cdot\sqrt{3}}{\sqrt{3}\cdot\sqrt{3}} = \frac{2\sqrt{3}}{3}$	4) R $\sec(\vartheta) = \frac{2}{1} = 2$	5) N $\cot(\vartheta) = \frac{1\cdot\sqrt{3}}{\sqrt{3}\cdot\sqrt{3}} = \frac{\sqrt{3}}{3}$
$0^0 < \alpha < 180^0$ (S/A) $(-3)^2+x^2=5^2$, $9+x^2=25$, $x^2=16$, you should know this → $x=4$	6) W $\sin(\alpha) = \frac{4}{5}$	$\cos(\alpha) = -\frac{3}{5}$	7) I $\tan(\alpha) = \frac{-4}{3}$
	8) T $\csc(\alpha) = \frac{5}{4}$	9) O $\sec(\alpha) = \frac{-5}{3}$	10) A $\cot(\alpha) = \frac{-3}{4}$
$90^0 < \theta < 270^0$ (S/T) $(-1)^2+x^2=4^2$, $1+x^2=16$, $x^2=15$, $x=\sqrt{15}$	11) E $\sin(\theta) = \frac{-1}{4}$	12) V $\cos(\theta) = -\frac{\sqrt{15}}{4}$	13) H $\tan(\theta) = \frac{1\cdot\sqrt{15}}{\sqrt{15}\cdot\sqrt{15}} = \frac{\sqrt{15}}{15}$
	$\csc(\theta) = -4$ ($\frac{-4}{1}$)	14) G $\sec(\theta) = \frac{-4\cdot\sqrt{15}}{\sqrt{15}\cdot\sqrt{15}} = \frac{-4\sqrt{15}}{15}$	15) Q $\cot(\theta) = \frac{\sqrt{15}}{1} = \sqrt{15}$
$180^0 < \beta < 360^0$ (T/C) $(-5)^2+12^2=c^2$, $25+144=c^2$, $169=c^2$, $13=c$ (you should know this)	16) O $\sin(\beta) = \frac{-5}{13}$	17) T $\cos(\beta) = \frac{12}{13}$	$\tan(\beta) = -\frac{5}{12}$
	18) U $\csc(\beta) = \frac{-13}{5}$	19) H $\sec(\beta) = \frac{13}{12}$	20) D $\cot(\beta) = \frac{-12}{5}$

Values

A. $-\frac{3}{4}$	B. $\frac{3}{4}$	C. $\frac{3}{5}$	D. $-\frac{12}{5}$	E. $\frac{2\sqrt{3}}{3}$	E. $-\frac{1}{4}$	G. $-\frac{4\sqrt{15}}{15}$	H. $\frac{\sqrt{15}}{15}$
H. $\frac{13}{12}$	I. $-\frac{4}{3}$	N. $\frac{\sqrt{3}}{3}$	O. $-\frac{5}{3}$	O. $-\frac{5}{13}$	P. $\sqrt{3}$	Q. $\sqrt{15}$	R. 2
S. $\frac{1}{2}$	T. $\frac{5}{4}$	T. $\frac{12}{13}$	U. $-\frac{13}{5}$	V. $-\frac{\sqrt{15}}{4}$	W. $\frac{4}{5}$	X. $-\frac{\sqrt{3}}{3}$	Y. $\frac{\sqrt{7}}{3}$

He (19 3) Didn't (20 7 20 5 ' 8) Want (6 10 5 8)

The (8 19 3) High (19 7 14 19) Pot (2 16 17) In (7 5) Use (18 1 11)

To (8 9) Have (13 10 12 3) Square (1 15 18 10 4 11) Roots (4 16 9 17 1)