Algebra 2 | Monday | 12-10-12 | Class Notes

① $_nP_r = \frac{N!}{(N-r)!}$

$_9P_4 = \frac{9!}{(9-4)!} = 9 \cdot 8 \cdot 7 \cdot 6 = \boxed{3024}$

$$\begin{array}{r} 72 \\ \times 42 \\ \hline 144 \\ 288 \\ \hline 3024 \end{array}$$

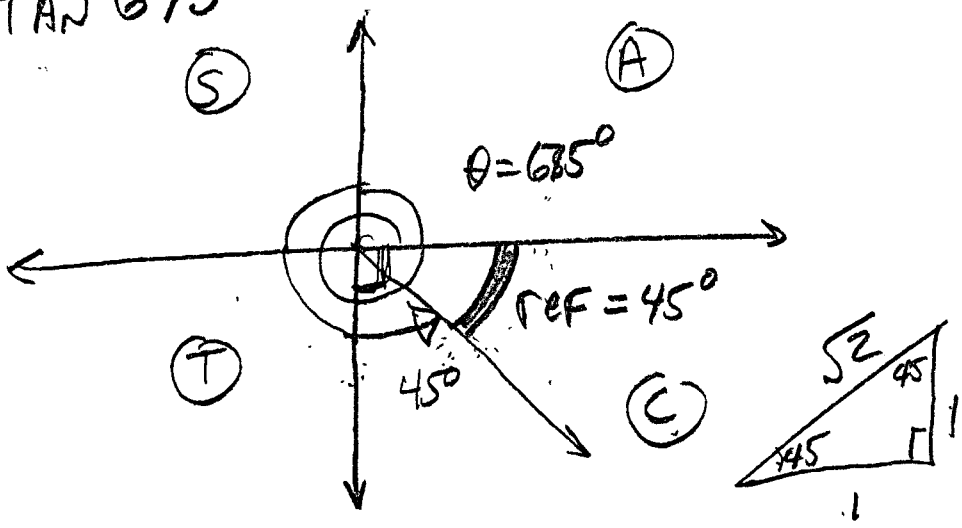
② $_nC_r = \frac{N!}{(N-r)!\,r!}$

$_{12}C_3 = \frac{12!}{(12-3)!\,3!} = \frac{12 \cdot 11 \cdot 10}{3 \cdot 2 \cdot 1} = \boxed{220}$

③ 24 uniforms FCP

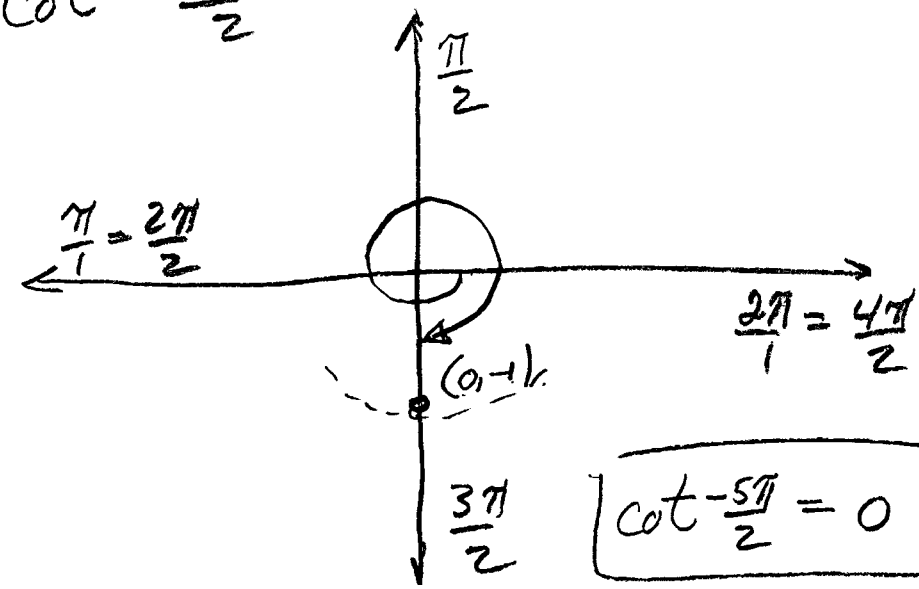
"EXACT"

(4) $\tan 675^\circ$



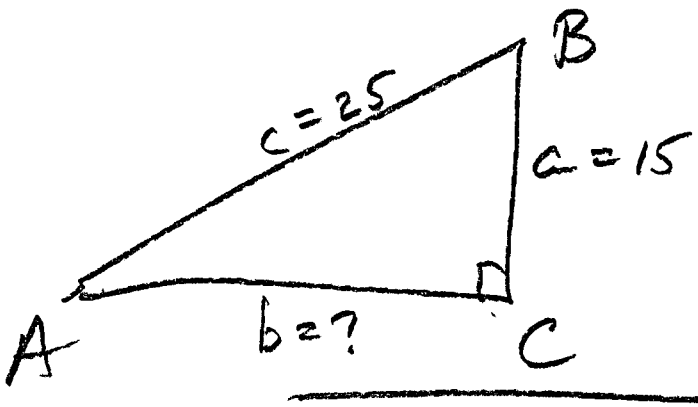
$\tan 675^\circ = -\tan 45^\circ = -1$

(10) $\cot -\frac{5\pi}{2}$



$\cot -\frac{5\pi}{2} = 0$ ✓

(40) $\sin A$? $\angle C = 25$, $a = 15$



$$\sin A = \frac{15}{25} = \frac{3}{5}$$

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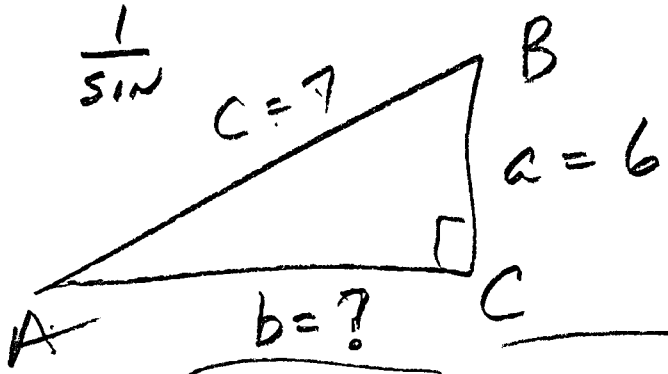
(42) find $\csc A$ $a = 6$, $c = 7$

$\frac{1}{\sin}$



$$\csc A = \frac{H}{O} = \frac{7}{6}$$