tcore 122: Quiz 4

x	22.5°	30°	45°	60°	67.5°	135°
$\cos(x)$	$\frac{\sqrt{2+\sqrt{2}}}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	$\frac{\sqrt{2-\sqrt{2}}}{2}$	$-\frac{\sqrt{2}}{2}$
$\sin(x)$	$\frac{\sqrt{2-\sqrt{2}}}{2}$	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2+\sqrt{2}}}{2}$	$\frac{\sqrt{2}}{2}$
$\tan(x)$	$\sqrt{\frac{2-\sqrt{2}}{2+\sqrt{2}}}$	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	$\sqrt{\frac{2+\sqrt{2}}{2-\sqrt{2}}}$	-1

1. (Wheater $\S10.1$) Use the triangle ABC and find the following:

(a) [1] $\sin \angle C$



(e) [1] the measure of angle B

2. [4] (Wheater §10.2) A kite string attached to the ground makes and angle of 67.5° with the ground. When the full 500 ft of string has been played out, how hight is the kite?

3. [3] (textbook) Lang's chapter five is called "Splitting Points". Explain what point-splitting is.

4. [2] (Lang) What might a person use point-splitting for when designing an origami pattern?

5. [3] (5/7 lecture) Identify two online resources that the library has made available for math students (note: this includes people from this class!).

6. [2] Identify what helped you the most when folding the Valentine/Hummingbird. Do you think this would be helpful in other contexts (i.e. writing up worksheets, writing papers, completing homework sets for physics, performing labs in chemistry, etc...)?