5. $\cos\left(\arcsin -\frac{1}{2}\right)$

① $p = \arcsin -\frac{1}{2}$

$\sin p = \sin\left(\arcsin -\frac{1}{2}\right)$

$\sin p = -\frac{1}{2}$

AND

SIN IS $\frac{y}{r}$

X	⊗

QIV

so $y = -1$, $r = 2$

$x^2 + y^2 = r^2$

$x^2 + (-1)^2 = 2^2$

$x^2 + 1 = 4$

$x^2 = 3$

$x = \pm\sqrt{3}$

$x = \sqrt{3}$

② COS IS $\frac{x}{r}$

SO

$\frac{\sqrt{3}}{2}$

x, y, r Formulas

$\cos\theta = \frac{x}{r}$

$\sin\theta = \frac{y}{r}$

$\tan\theta = \frac{y}{x}$

$\sec\theta = \frac{r}{x}$

$\csc\theta = \frac{r}{y}$

$\cot\theta = \frac{x}{y}$

6. $\tan\left(\arccos \frac{3}{7}\right)$

① $p = \arccos \frac{3}{7}$

$\cos p = \cos\left(\arccos \frac{3}{7}\right)$

$\cos p = \frac{3}{7}$

AND

COS IS $\frac{x}{r}$

	⊗
	X

QI

so $x = 3$, $r = 7$

$x^2 + y^2 = r^2$

$3^2 + y^2 = 7^2$

$9 + y^2 = 49$

$y^2 = 49 - 9$

$y^2 = 40$

$y = \pm\sqrt{40}$

$y = \sqrt{2 \cdot 2 \cdot 2 \cdot 5}$

$y = 2\sqrt{10}$

② TAN IS $\frac{y}{x}$

SO

$\frac{2\sqrt{10}}{3}$