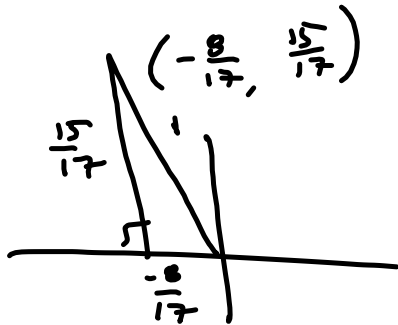


Draw the triangle(s)



$$\frac{64}{209}$$

$$17^2 = 289$$

$$\left(-\frac{8}{17}\right)^2 + \left(\frac{15}{17}\right)^2 =$$

Extract trig ratios  
from the triangle.

$$\frac{64 + 225}{289} = \frac{289}{289} \checkmark$$

sin without its argument

is a sin

sin - Biblical

sin( $\frac{3\pi}{4}$ ) - Trigonometrical

Don't leave out the argument.

Finally " $\approx$ " for approx. values

$$\sin\left(\frac{\pi}{3}\right) = \frac{\sqrt{3}}{2} \approx .8660$$

```
146^5
12.08304597
sin(60
.8660254038
```

1. (10 pts) Find two angles, between  $-2\pi$  and  $2\pi$  (i.e.,  $0^\circ$  and  $360^\circ$ ) that are coterminal with  $\frac{35\pi}{6}$ . Give exact answers in degrees and radians.

$$\left(\frac{35\pi}{6}\right)\left(\frac{180}{\pi}\right) = 1050^\circ ?$$

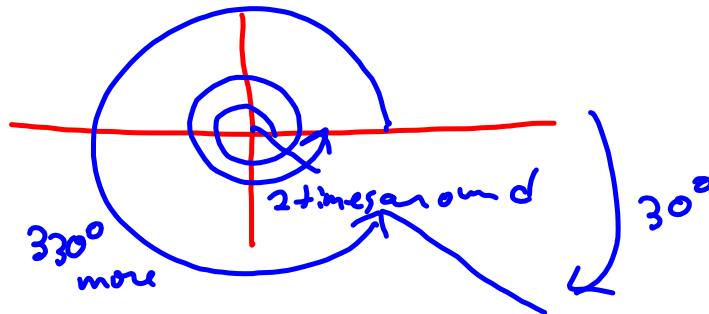
$$\frac{1050^\circ}{360^\circ} = 2.916666667$$

```

12.08304597
sin(60
.8660254038
1050/360
2.916666667
1050-2*360
330

```

2.9 times around  
 The angle we want +



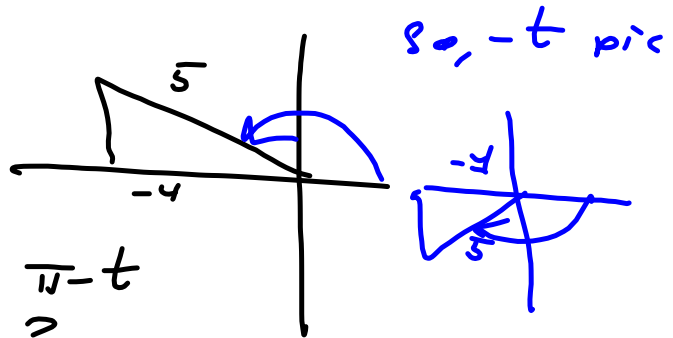
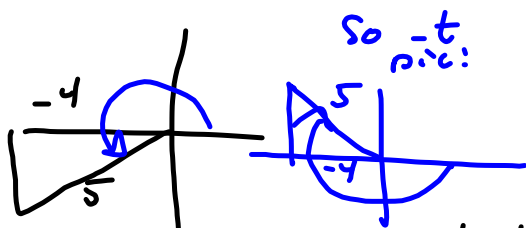
So  $\frac{35\pi}{6}$  is coterminal with  $330^\circ$  &  $-30^\circ$

$\frac{11\pi}{6}$        $-\frac{\pi}{6}$

$(330)\left(\frac{\pi}{180}\right) = \frac{11\pi}{6}$

$30\left(\frac{\pi}{180}\right) = \frac{\pi}{6}$

$\cos t = -\frac{4}{5}$   
 $\cos(\pi - t) = ?$   
 Draw it!



Now, what's  $\pi - t$  look like?

ADD  $\pi$  to the " $-t$ " pics

