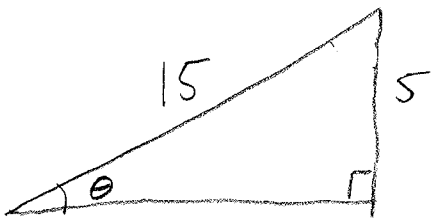
(1) Find y, when $\sin y = \frac{-\sqrt{3}}{2}$ and $0 \leq y < 2\pi$.
(y should be in radians)

(2) convert your answers to degrees.

(3) What are the reference angles?

(4) Find all values of α between 0 and 2π such that $\cos^2\alpha = \frac{3}{4}$

(5) Find the angle θ for the following right triangle.

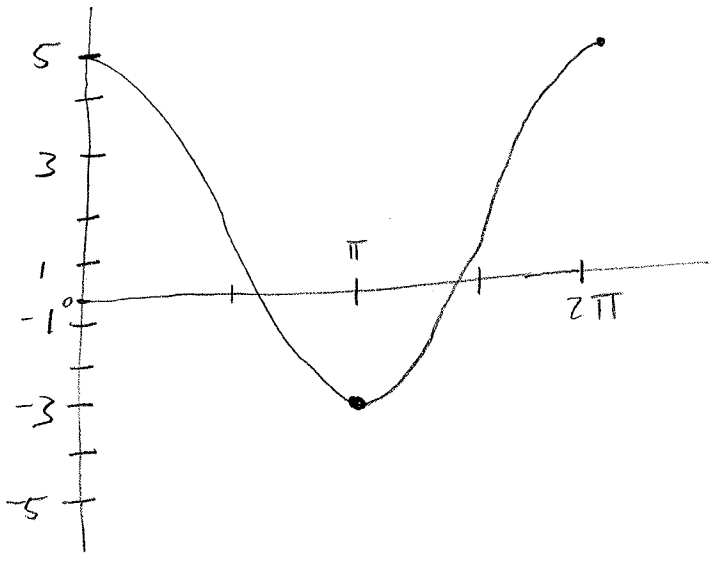


① $y = \sin(\pi x)$ What is the period?

② Find the exact value of $\tan\left(\sin^{-1}\left(\frac{y}{x}\right)\right)$

③ What is the amplitude? $y = -7\cos x - 2$

④ What is the amplitude?
What is the vertical shift?



Find the exact values in degrees and radians

① (a) $\sin^{-1}(-1)$

(b) $\cos^{-1}\left(\frac{-1}{2}\right)$

(c) $\tan^{-1}\left(\sqrt{3}\right)$

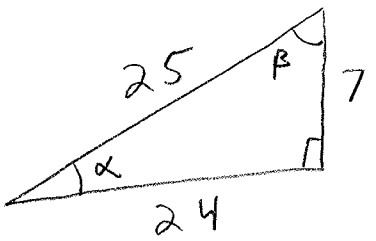
(d) $\cos^{-1}(1.1)$

(e) $\cos^{-1}\left(\cos\left(\frac{4\pi}{3}\right)\right)$

(f) $\sin^{-1}\left(\sin\left(\frac{4\pi}{3}\right)\right)$

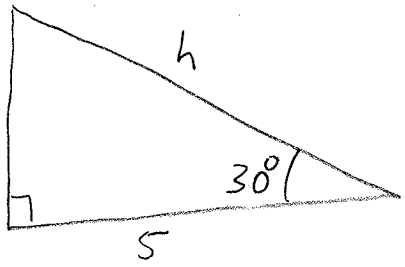
(g) $\sin^{-1}(1.1)$

② A television camera at ground level is filming the lift-off of a space shuttle at a point 800 m from the Launch pad. When the shuttle is 100m off the ground, What is the angle of elevation from the camera to the shuttle?

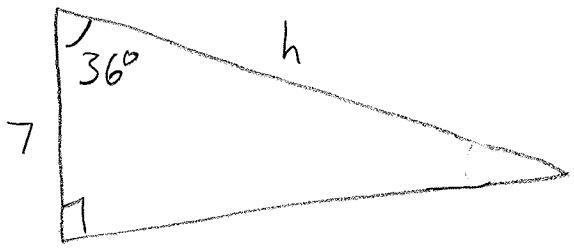
① 

Find
- $\sin\alpha$
- $\csc\alpha$
- $\cot\alpha$
- $\cos\beta$
- $\sec\beta$
- $\tan\beta$

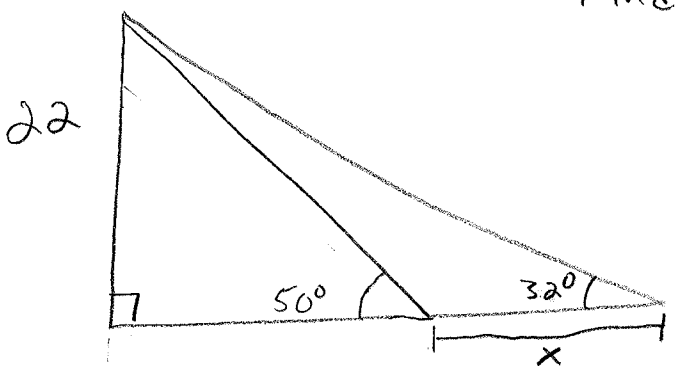
Find the specific angles α and β.

② 

Find h.

③ 

Find h.

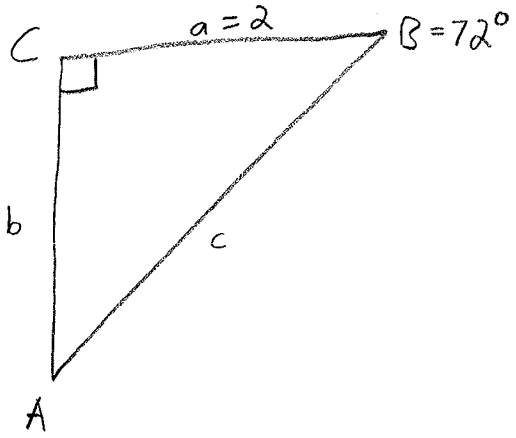
④ 

Find x

① Find a positive and a negative angle coterminal to $280°$.

convert your answers to radians

② Solve the triangle



③ Find the length of the arc formed by a piece of string wrapped a third of the way around a circle with radius 5 feet.

(1) Convert $\frac{8\pi}{5}$ into degrees

(2) Find the reference angle for (1).
(You may use the degree answer)

(3) Find the exact value of $\sec(\tan^{-1}(\frac{2}{3}))$

(4) Find the equation of the following graph.