If $\sin\theta = \dfrac{1}{2}$, what is the value of θ ?

<div style="border:1px solid">

Definitions of Inverse Functions **(textbook reference page 792)**

Inverse Sine $sin^{-1}a = \theta$, **if** $sin\,\theta = a$ **and** $-90° \le \theta \le 90°$ $\left(\dfrac{-\pi}{2} \le \theta \le \dfrac{\pi}{2}\right)$

Inverse Cosine $cos^{-1}a = \theta$, **if** $cos\,\theta = a$ **and** $0° \le \theta \le 180°$ $\left(0 \le \theta \le \pi\right)$

Inverse Tangent $tan^{-1}a = \theta$, **if** $tan\,\theta = a$ **and** $-90° < \theta < 90°$ $\left(\dfrac{-\pi}{2} < \theta < \dfrac{\pi}{2}\right)$

*Inverse Cotangent $cot^{-1}a = \theta$, **if** $cot\,\theta = a$ **and** $0° < \theta < 180°$ $\left(0 < \theta < \pi\right)$
(*not in textbook)

</div>

Summary:

Evaluate without a calculator. Give angle measures in degrees and radians.
1.   2.

3.

Evaluate without a calculator. Give answers in simplest form.

4.   5.

Definitions of Inverse Functions (not in our textbook)

Inverse Cosecant $csc^{-1} a = sin^{-1}\left(\dfrac{1}{a}\right)$, if $a \neq 0$

Inverse Secant $sec^{-1} a = cos^{-1}\left(\dfrac{1}{a}\right)$, if $a \neq 0$

Evaluate without a calculator.

6.   7.