Choose the correct answer in each of the following:

1. $\frac{3\pi}{2} =$

(a) 270°

(b) 240°

(c) 720°

(d) 420°

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2. −315° =

(a) $-\frac{7\pi}{4}$

(b) $\frac{4\pi}{7}$

(c) $\frac{7\pi}{4}$

(d) $-\frac{4\pi}{7}$

---

3. If $\tan\theta = 2$ and $0 < \theta < \frac{\pi}{2}$ then, $\csc\theta =$

(a) $\frac{2}{\sqrt{5}}$

(b) $\frac{\sqrt{5}}{2}$

(c) $-\frac{2}{\sqrt{5}}$

(d) $-\frac{\sqrt{5}}{2}$

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4. If $\sin\theta = \frac{1}{2}$ and $\cos\theta = \frac{\sqrt{3}}{2}$ then $\sin 2\theta =$

(a) $\frac{1}{2}$

(b) -1

(c) $\frac{\sqrt{3}}{2}$

(d) $-\frac{\sqrt{3}}{2}$

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5. The domain of the function $f(x) = \csc x$ is

(a) $\mathbb{R} - \{\pm\frac{\pi}{2}, \pm\frac{3\pi}{2}, \pm\frac{5\pi}{2}, \ldots\}$

(b) $\mathbb{R} - \{0, \pm\pi, \pm2\pi, \pm3\pi, \ldots\}$

(c) $\mathbb{R} - \{\frac{\pi}{2}, \frac{3\pi}{2}, \frac{5\pi}{2}, \ldots\}$

(d) $\mathbb{R} - \{0, \pi, 2\pi, 3\pi, \ldots\}$

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ans: 1-a, 2-a, 3-b, 4-c, 5-b