

Q1. If $\csc \theta = \frac{3}{2}$ and $\cos \theta < 0$, then $\tan \theta =$

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

(b) $\sqrt{5}$

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

(d) $-\sqrt{5}$

Q2. The complementary angle of $33^{\circ}33'33''$ is

(a) $46^{\circ}26'27''$

(b) $136^{\circ}26'27''$

(c) $57^{\circ}27'27''$.

(d) $66^{\circ}26'27''$.

Q3. The first negative coterminal angle of 920° is

(a) -160°

(b) -120°

(c) -140°

(d) -120°

Q4. The period of the function $f(x) = \left| 2 \sin \frac{3\pi x}{2} \right|$

(a) $2/3$

(b) $3/2$

(c) $4/3$

(d) 4

Q1. Find the exact value of $\cot\left(-\frac{35\pi}{6}\right)$

Q2. Sketch the graph of $f(x) = 2\csc\left(-\frac{x}{2}\right)$.

Find the range and domain of f .