



Precalculus: Angles

Name _____ Date _____

Find the coterminal angle of the given angle in the required units

(1) $-\frac{223\pi}{30}rad \rightarrow \text{Degrees}$

(2) $-\frac{51\pi}{20}rad \rightarrow \text{Degrees}$

(3) $-846^\circ \rightarrow \text{Degrees}$

(4) $1179^\circ \rightarrow rad$

(5) $-1098^\circ \rightarrow \text{Degrees}$

(6) $576^\circ \rightarrow rad$

(7) $\frac{169\pi}{60}rad \rightarrow rad$

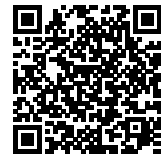
(8) $\frac{148\pi}{15}rad \rightarrow rad$

(9) $-402^\circ \rightarrow rad$

(10) $369^\circ \rightarrow \text{Degrees}$

(11) $-\frac{233\pi}{30}rad \rightarrow rad$

(12) $-\frac{313\pi}{60}rad \rightarrow \text{Degrees}$



Answers

Find the coterminal angle of the given angle in the required units

$$(1) \quad -\frac{223\pi}{30}rad \rightarrow \text{Degrees}$$

$$= 102^\circ$$

$$(2) \quad -\frac{51\pi}{20}rad \rightarrow \text{Degrees}$$

$$= 261^\circ$$

$$(3) \quad -846^\circ \rightarrow \text{Degrees}$$

$$= 234^\circ$$

$$(4) \quad 1179^\circ \rightarrow rad$$

$$= \frac{11\pi}{20}rad$$

$$(5) \quad -1098^\circ \rightarrow \text{Degrees}$$

$$= 342^\circ$$

$$(6) \quad 576^\circ \rightarrow rad$$

$$= \frac{6\pi}{5}rad$$

$$(7) \quad \frac{169\pi}{60}rad \rightarrow rad$$

$$= \frac{49\pi}{60}rad$$

$$(8) \quad \frac{148\pi}{15}rad \rightarrow rad$$

$$= \frac{28\pi}{15}rad$$

$$(9) \quad -402^\circ \rightarrow rad$$

$$= \frac{53\pi}{30}rad$$

$$(10) \quad 369^\circ \rightarrow \text{Degrees}$$

$$= 9^\circ$$

$$(11) \quad -\frac{233\pi}{30}rad \rightarrow rad$$

$$= \frac{7\pi}{30}rad$$

$$(12) \quad -\frac{313\pi}{60}rad \rightarrow \text{Degrees}$$

$$= 141^\circ$$