

Algebra 2 Bellwork Degrees, Radians, and Coterminal Angles

Convert each to degrees.

1. $\frac{13\pi}{2}$

2. $-\frac{31\pi}{9}$

3. $\frac{7\pi}{15}$

4. -13π

Convert to radians. Give your answer as a reduced fraction where necessary (no decimals!)

5. 990°

6. 195°

7. 765°

8. -408°

Find an angle between 0° and 360° that is coterminal with the given angles.

9. 1233°

10. -504°

Find an angle between 0 and 2π that is coterminal with the given angles.

11. $-\frac{37\pi}{13}$

12. $\frac{63\pi}{5}$

In which quadrant or on which axis does the terminal side of each angle lie?

13. -1204°

14. $\frac{46\pi}{4}$

15. 1093°

16. $-\frac{28\pi}{3}$

Algebra 2 Bellwork Degrees, Radians, and Coterminal Angles

Answers

Convert each to degrees.

1. $\frac{13\pi}{2}$

1170°

2. $-\frac{31\pi}{9}$

-620°

3. $\frac{7\pi}{15}$

84°

4. -13π

-2340°

Convert to radians. Give your answer as a reduced fraction where necessary (no decimals!)

5. 990°

$\frac{11\pi}{2}$

6. 195°

$\frac{13\pi}{12}$

7. 765°

$\frac{17\pi}{4}$

8. -408°

$-\frac{34\pi}{15}$

Find an angle between 0° and 360° that is coterminal with the given angles.

9. 1233°

153°

10. -504°

216°

Find an angle between 0 and 2π that is coterminal with the given angles.

11. $-\frac{37\pi}{13}$

$\frac{15\pi}{13}$

12. $\frac{63\pi}{5}$

$\frac{3\pi}{5}$

In which quadrant or on which axis does the terminal side of each angle lie?

13. -1204°

III

14. $\frac{46\pi}{4}$

neg y-axis

15. 1093°

I

16. $-\frac{28\pi}{3}$

II