Name: _____ Score: _____

Readiness Test

Simplify. Your answer should contain only positive exponents.

1) $3n \cdot n$

$3n^2$

2) $x \cdot 2x \cdot 2x^3$

$4x^5$

3) $(y^0)^3 \cdot x^4$

x^4

4) $(-xy^{-2})^5 \cdot y^4$ $-\frac{x^5}{y^6}$

5) $v^2 \cdot (-uv^{-2})^4$ $\frac{u^4}{v^6}$

Simplify.

6) $(\sqrt[4]{m})^7$

$m^{\frac{7}{4}}$

7) $\sqrt{6r}$

$(6r)^{\frac{1}{2}}$

8) $\frac{1}{(\sqrt[3]{6n})^4}$

$(6n)^{-\frac{4}{3}}$

9) $(p^2)^{\frac{3}{2}}$

p^3

10) $(x^6)^{\frac{3}{2}}$

x^9

Convert each degree measure into radians and each radian measure into degrees.

11) 100° $\frac{5\pi}{9}$

12) 225° $\frac{5\pi}{4}$

13) -240° $-\frac{4\pi}{3}$

14) 120° $\frac{2\pi}{3}$

15) $\frac{83\pi}{18}$

830°

State the quadrant in which the terminal side of each angle lies.

16) −127°

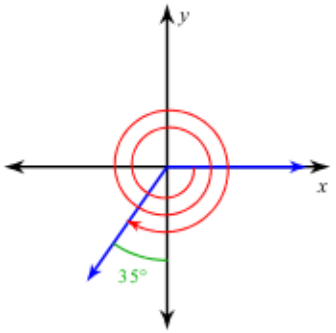
III

17) 30°

I

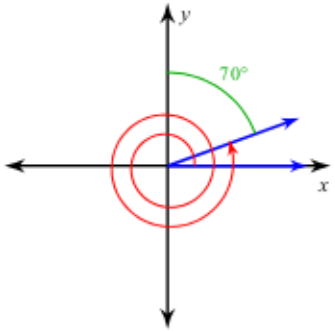
Find the measure of each angle.

18)



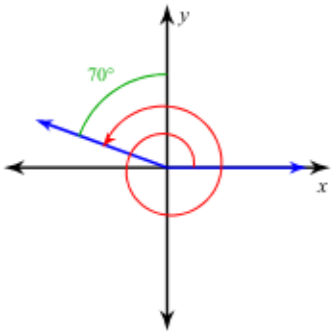
−845°

19)



740°

20)



520°

Find the reference angle.

21) $-\frac{13\pi}{4}$ $\frac{\pi}{4}$

22) $-\frac{16\pi}{9}$ $\frac{2\pi}{9}$

23) $\frac{7\pi}{3}$ $\frac{\pi}{3}$

Find a positive and a negative coterminal angle for each given angle.

24) 330°

690° and −30°

25) 645°

285° and −75°