Name: _____ 5-a-day Higher

23rd August

Corbettmaths

Evaluate

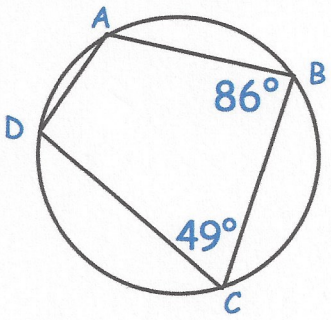
$1000^{\frac{1}{3}}$ $\sqrt[3]{1000} = 10$

10

Evaluate

$27^{\frac{2}{3}}$ $\sqrt[3]{27} = 3$

$3^2 = 9$



Find angle BAD.

131°

Find angle ADC.

94°

A and B are positive numbers.
A is inversely proportional to B.
When A = 4, B = 36.

Find the value of A when B = A.

$A \propto \frac{1}{B}$ $k = 144$

$A = \frac{k}{B}$ $A = \frac{144}{B}$

$4 = \frac{k}{36}$ when $A = 12$, $B = 12$

Simplify

$\frac{\sqrt{6}}{\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{18}}{3}$

$\frac{\sqrt{9} \times \sqrt{2}}{3}$

$\frac{3\sqrt{2}}{3} = \sqrt{2}$

Solve the simultaneous equations

$\frac{2}{3}x + \frac{1}{2}y = -1$ (×6)

$x - y = 16$

$4x + 3y = -6$

$x - y = 16$ (×3)

$4x + 3y = -6$

$3x - 3y = 48$

$7x = 42$

$x = 6$

$y = -10$