

8th August



Corbettmaths

Solve

$$x\sqrt{5} = \frac{6x}{\sqrt{5}} - 9$$

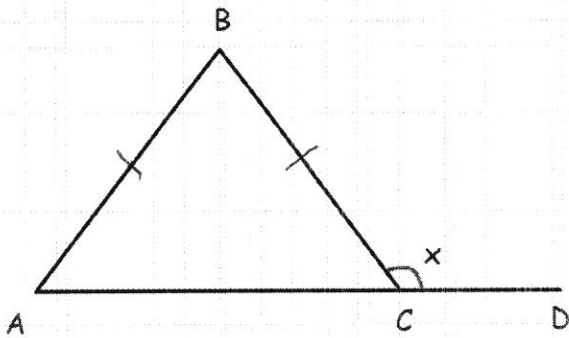
$$5x = 6x - 9\sqrt{5}$$

$$\underline{9\sqrt{5} = x}$$

Use Pascal's triangle to expand $(x + y)^4$

1	4	6	4	1
x^4	x^3	x^2	x	1
1	y	y^2	y^3	y^4

$$\underline{x^4 + 4x^3y + 6x^2y^2 + 4xy^3 + y^4}$$



ABC is an isosceles triangle.
 $AB = BC$
 ACD is a straight line.

Angle $BCD = x^\circ$

Prove angle $ABC = (2x - 180)^\circ$

$$\hat{ACB} = 180 - x$$

$$\hat{CAB} = \frac{180 - x}{2} \quad (AB = BC)$$

$$360 - 2x$$

$$\hat{ABC} = 180 - (360 - 2x)$$

$$= \underline{2x - 180}$$

$\angle BAD = x$

Express $\angle BCD$ in terms of x

$$\underline{180 - x} \quad (\text{ABCD cyclic qd.})$$

