



Expand and simplify

$$(2x - 1)^3$$

$$(2x - 1)(2x - 1)$$

$$4x^2 - 2x - 2x + 1 = 4x^2 - 4x + 1$$

$$(4x^2 - 4x + 1)(2x - 1)$$

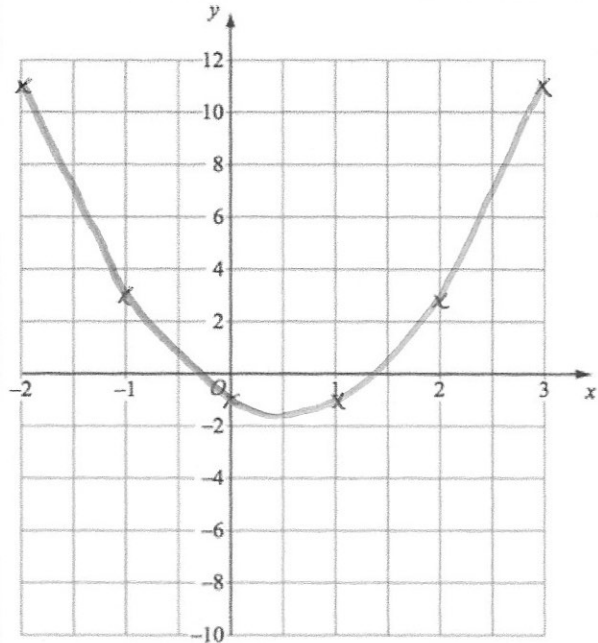
$$8x^3 - 4x^2 - 8x^2 + 4x + 2x - 1$$

$$8x^3 - 12x^2 + 6x - 1$$

Draw $y = 2x^2 - 2x - 1$

$$x \quad -2 \quad -1 \quad 0 \quad 1 \quad 2 \quad 3$$

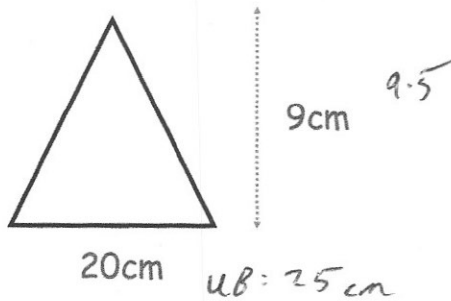
$$y \quad 11 \quad 3 \quad -1 \quad -1 \quad 3 \quad 11$$



Use your graph to find an estimate of the coordinates of the minimum point of the graph of

$$y = 2x^2 - 2x - 1$$

$$(0.5, -1.5)$$

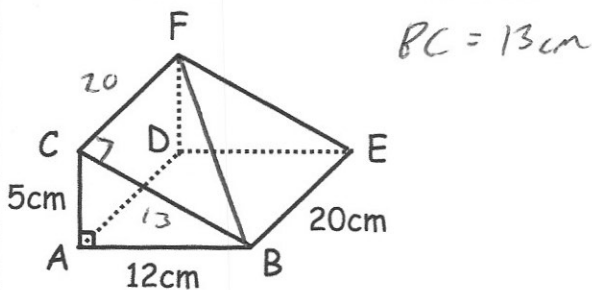


Shown is a triangle with measurements given to 1 significant figure.

Calculate the upper bound for the area

$$\frac{1}{2} \times 25 \times 9.5$$

$$= 118.75 \text{ cm}^2$$



Shown is a triangular prism. ABC is a right angled triangle. Find the length BF.

$$BF^2 = 13^2 + 20^2$$

$$BF^2 = 569$$

$$BF = 23.85 \text{ cm}$$