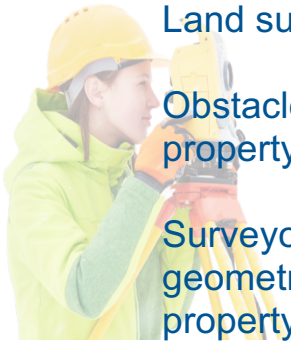
# Writing a Polynomial to Represent Perimeter



Land surveyors define and measure the boundaries of property.

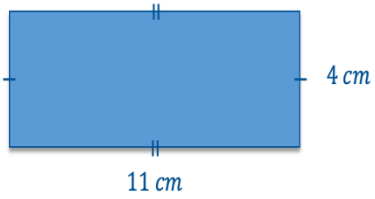
Obstacles such as water, hills and thick vegetation can make property measurement difficult.

Surveyors rely on their understanding of mathematics, such as geometry and algebra, when calculating the boundaries of a property.

- How would I define the perimeter of the rectangle shown here?

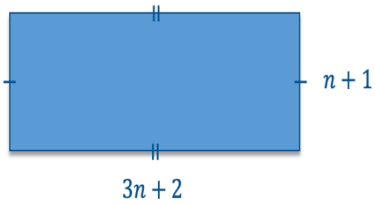
If the length of the rectangle is $11cm$ and the width of the rectangle is $4cm$…

- How would I explain and demonstrate calculating the perimeter of the rectangle?

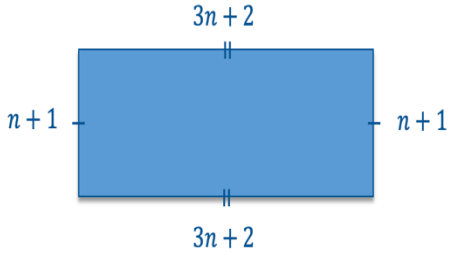



I'll try a similar problem, but this time, I'll change the distance measured on the sides.

- How would I describe the distances shown on each side of the rectangle?



- How would I use the polynomial distances to illustrate the perimeter of the rectangle?



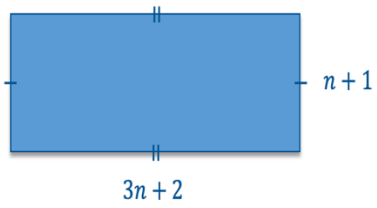

- How could I write my problem without brackets?

$$Perimeter = (3n + 2) + (n + 1) + (3n + 2) + (n + 1)$$

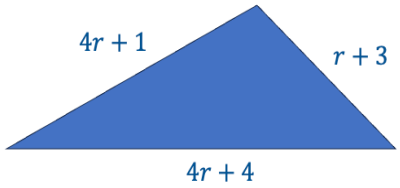
- How would I explain identifying my like terms?

- How would I explain and demonstrate combining my like terms?

- How would I use the polynomial $8n + 6$ to explain the perimeter of the rectangle?



I'll try one more example of writing a polynomial to represent perimeter.




- How would I use the polynomial distances to illustrate the perimeter of the triangle?

- How would I explain identifying my like terms?

- How would I explain and demonstrate combining my like terms?

# Writing a Polynomial to Represent Perimeter

Which statements do I feel confident explaining and demonstrating?
Which statements do I not feel confident explaining and demonstrating?