**Algebra and Proof**

***Three consecutive integers always add up to a multiple of three***.

Is this statement True or False?

Could you use algebra to prove it?

Explain your proof to a partner.

***The squares of three consecutive integers never add up to a multiple of three***.

Is this statement True or False?

Could you use algebra to prove it?

Explain your proof to a partner.

***Every prime number greater than 3 is either one more or one less than a multiple of six.***

Is this statement True or False?

***How*** might you prove it?

Explain your proof to a partner.