## 8.7.2: Connecting Algebra to Geometry

- 1. a) The sum of the interior angles in a triangle is:
  - b) An equation that models the sum of the interior angles in this triangle is:



c) Solve the equation to determine the value of x.

- d) Use the value of x to calculate the size of:  $\angle W$ :  $\angle Y$ :
- 2. a) The sum of the angles in a right angle is:
  - b) Write 2 equations to model the sums of the 2 sets of angles that add to 90°:
    (i)
    - (ii)
  - c) Solve these equations to determine the values.
    (i) solve for x<sup>o</sup>
    (ii) solve for y<sup>o</sup>

d) Use the values of x and y to calculate the size of:  $\angle CBP$ :  $\angle ABQ$ :



∠Z:

## 8.7.2: Connecting Algebra to Geometry (continued)

3. Write an equation and solve for the unknown. State the theorem used to make the equation.a)b)



8.7.2: Connecting Algebra to Geometry (continued)





