

MTH 202 - Quiz 4

2 October 2015

Name: _____

No calculators or other electronic devices are allowed on this quiz. If you need more space to solve a problem, use the back of the paper.

1. (5 points) Consider the following statement:

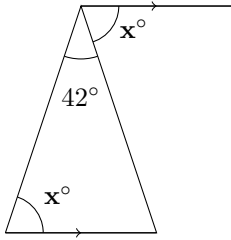
All rhombuses are squares.

Write this as an "if... then" statement, and determine whether it is true. Then write the converse and determine whether the converse is true.

2. (5 points) A polygon has m sides. One of its interior angles is 60° , and every other interior angle is 140° . How many sides does the polygon have?

3. (5+5=10 points) For the following problems, justify every step. Note, in each picture, the pair of parallel lines.

(a) Find an equation for x and solve it.



(b) Find a . *Hint:* You may find it helpful to extend the vertical line until it's a transversal of some other lines.

