1) · $a + b + c =$ ⌢
   **True**

   · Angle a and angle c both measure 60°.
   False

   · If angle a measures 55°, angle c will measure 25°.
   False, it will measure 35°.

2) **75° is the correct missing piece.**

3) $a = 34°$
   $b = 33°$
   $c = 15°$

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1) a) Never true. The interior angles of a triangle will always sum to 180°. The length of the side does not affect the total of the interior angles.

   b) Never true. Two obtuse angles can not be the interior angles of a triangle.

   c) Always true. A triangle must always have at least two acute angles.

2) a) Monika is incorrect. For example, combining the pieces that measure 90°, 100° and 30° would give you 220° which is more than the angles of a triangle add to.

   b) Robert is incorrect. For example, the angles he has chosen do add to 180° but they are not the only options. 90° + 80° + 10° and 70° + 80° + 30° also sum to 180°.

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1) $a = 72°$
   $b = 18°$
   $c = 90°$

2) Angle x measures 43°.

3) a) $a = 25°$

   b) $b = 22°$

   c) $c = 68°$

4) a) George's statement is false. The angles in a triangle add to 180°. 180 is an even number. Three odd numbers added together can not make an even number.

   b) Freya's statement is false. If Freya has one angle that is a right angle then the two remaining angles must add to make 90°. This means that the two remaining angles must be les than 90° each. An angle that is less than 90° is an acute angle.