Name _____   Date _____

Angles in a Multi-Step Problems - Guided Lesson Explanation

Explanation#1

The sum of all angles within a triangle = 180°

So the value of g = 180° - 40° - 40° = 100°

G = 100°

So x also 100° (opposite angles are equal)

Because these are vertical angles, the angles formed opposite each other when two lines intersect. Vertical angles are congruent.

Answer is: 100°

Explanation#2

All three angles are on the same line so the value of all the angles is 180°.

Value of a is 180° - 55° - 40° = 85°

So the value of a = 85°

Explanation#3

Complementary angles have measures that add to 90°. When a right angle is divided into two adjacent angles, complementary angles are formed.

90° - 70° = 20°

f = 20°