

Geometry Worksheet: Angle (5)

1. Find the measures of angles BAC and BCA in the figure below.

$$(x+10)^\circ + (x-20)^\circ = 180^\circ$$

$$(2x-10)^\circ = 180^\circ$$

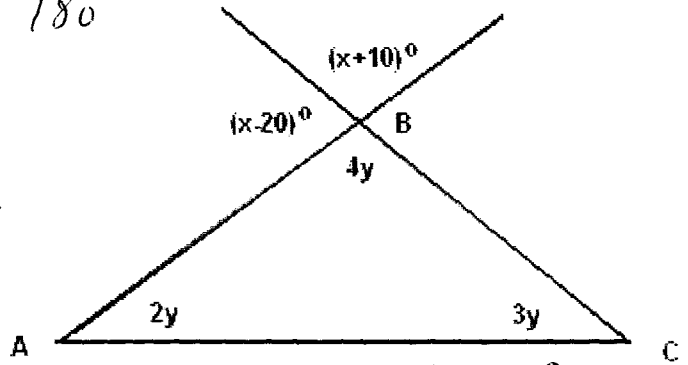
$$\Rightarrow x = 95^\circ$$

$$(x-20)^\circ + 4y = 180^\circ$$

$$\Rightarrow y = 26.25^\circ$$

$$BAC = 4y = \underline{105^\circ}$$

$$BCA = 3y = \underline{78.75^\circ}$$



2. Find the measure of each internal angle in the quadrilateral below.

$$A + B + C + D = 2 \times 180^\circ$$

$$3x + 2x + 4x + 3x = 2 \times 180^\circ$$

$$12x = 360^\circ$$

$$x = \frac{360}{12} = 30^\circ$$

$$A = 3x = 90^\circ$$

$$B = 2x = 60^\circ$$

$$C = 4x = 120^\circ$$

$$D = 3x = 90^\circ$$

