Geometry

Mr. Bower

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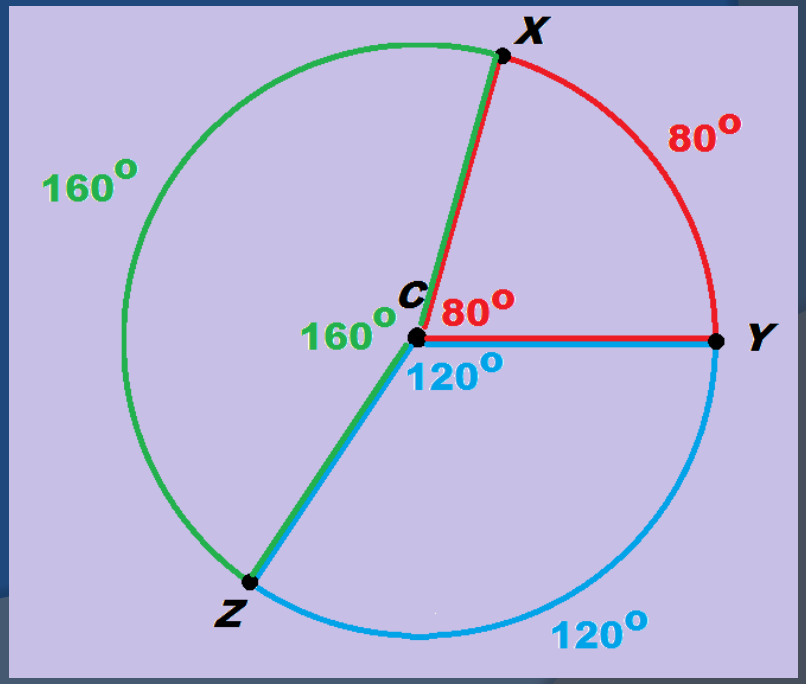
ARCS AND CENTRAL ANGLES

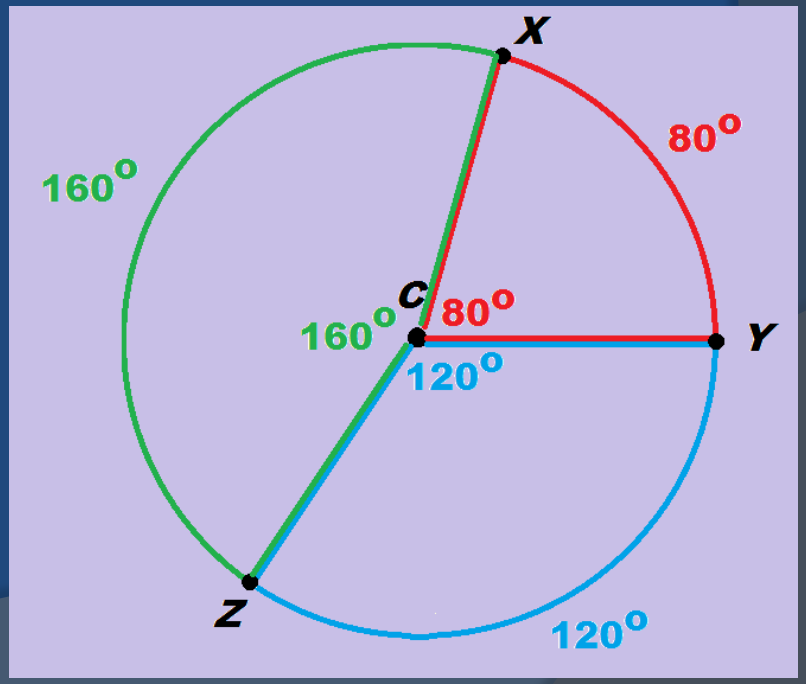
Central Angles

- The vertex is the center of the circle
- The sides are radii of the circle



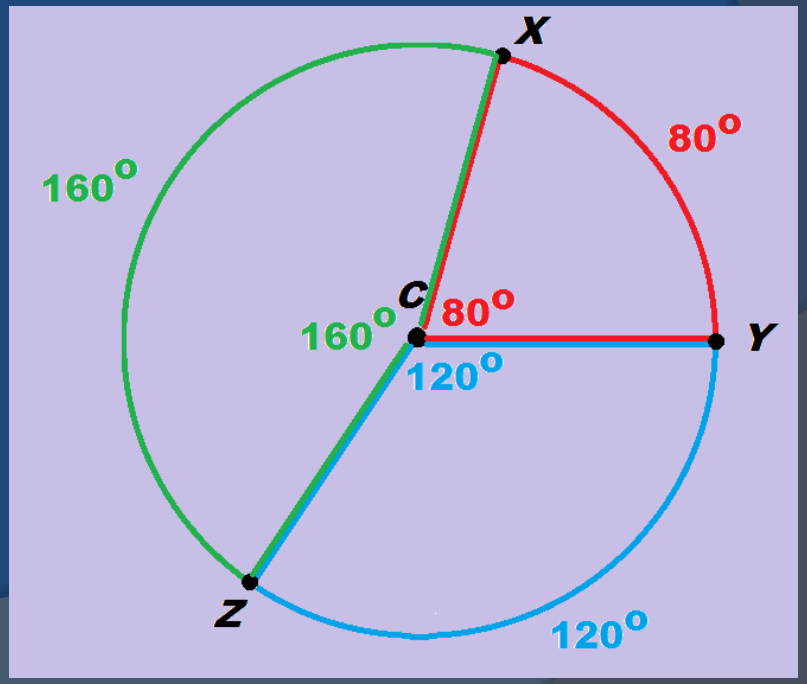
Central Angles

- $\angle XCY$ is a central angle
- YOU →Name two more central angles



Central Angles

- What is the sum of the red, blue, and green central ∠s?

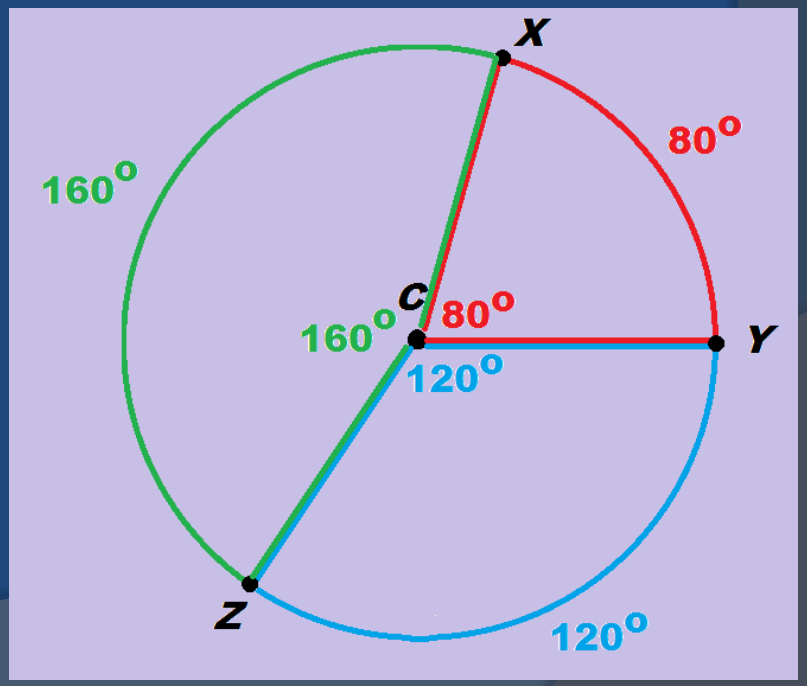


Arcs

- The measure of an arc = measure of its central angle

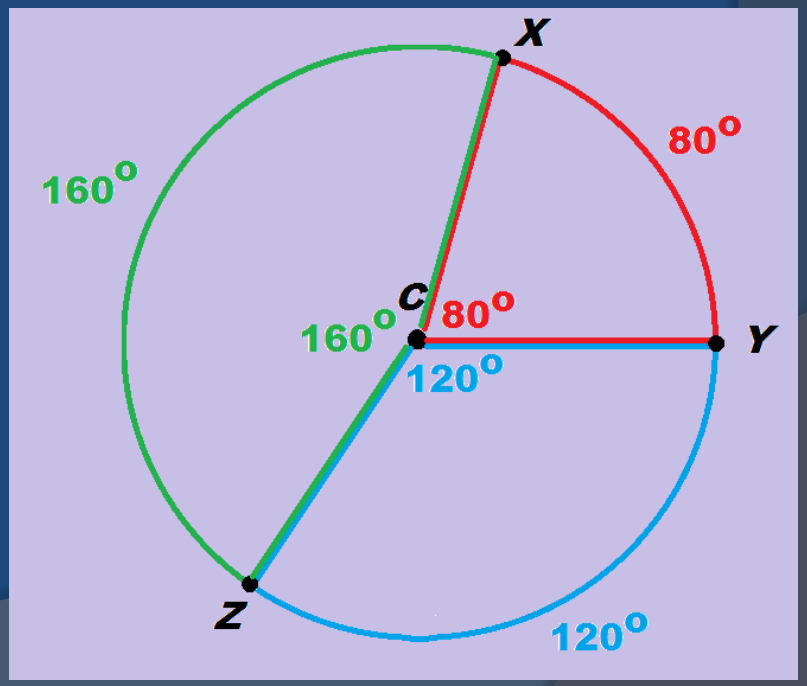
- $m\angle XCY = 80°$

- $m\overset{\frown}{XY} = 80°$



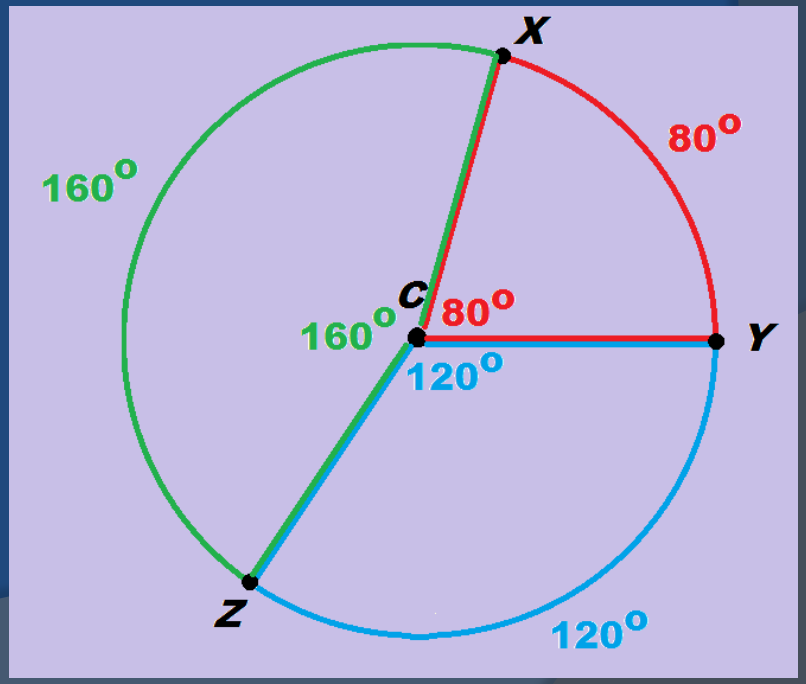
Arcs

- The measure of an arc = measure of its central angle
- m∠ZCY = ???°
- m $\overset{\frown}{ZY}$ = ???°



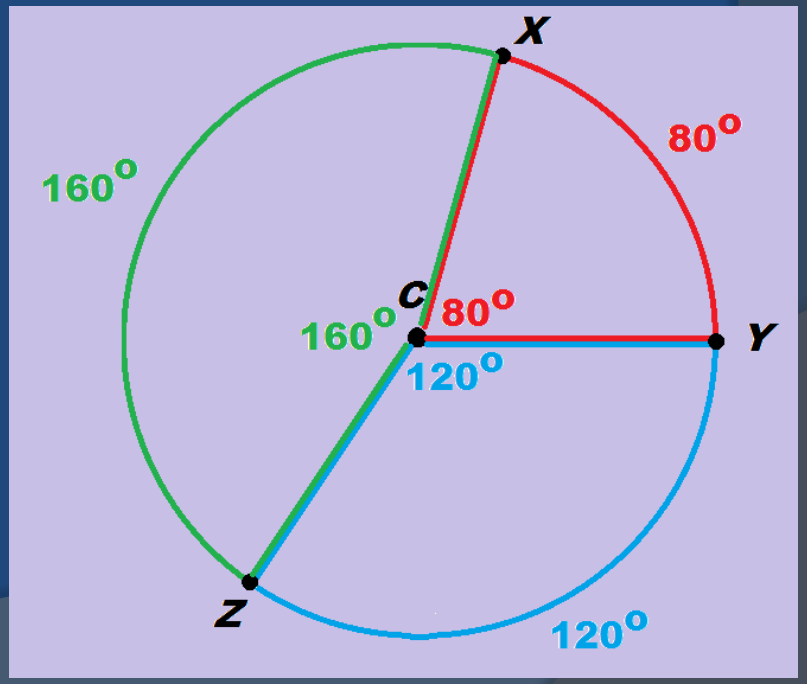
Arcs

- The measure of an arc = measure of its central angle
- m∠ZCX = ???°
- m $\overset{\frown}{ZX}$ = ???°



Arcs

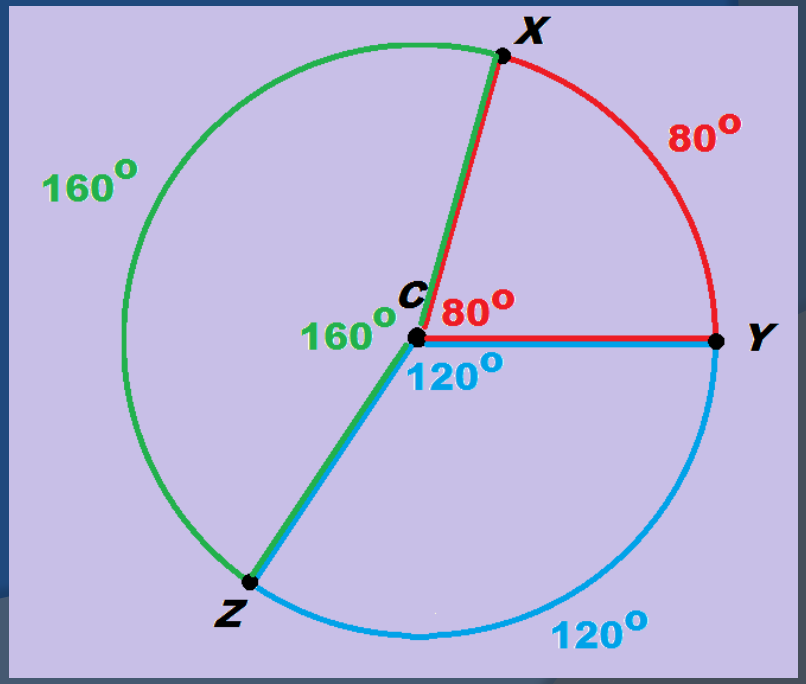
- What is the sum of the red, blue, and green arcs?



Minor Arcs

- **Minor arcs** are < 180°
- When you see exactly two letters, this is a **minor arc**

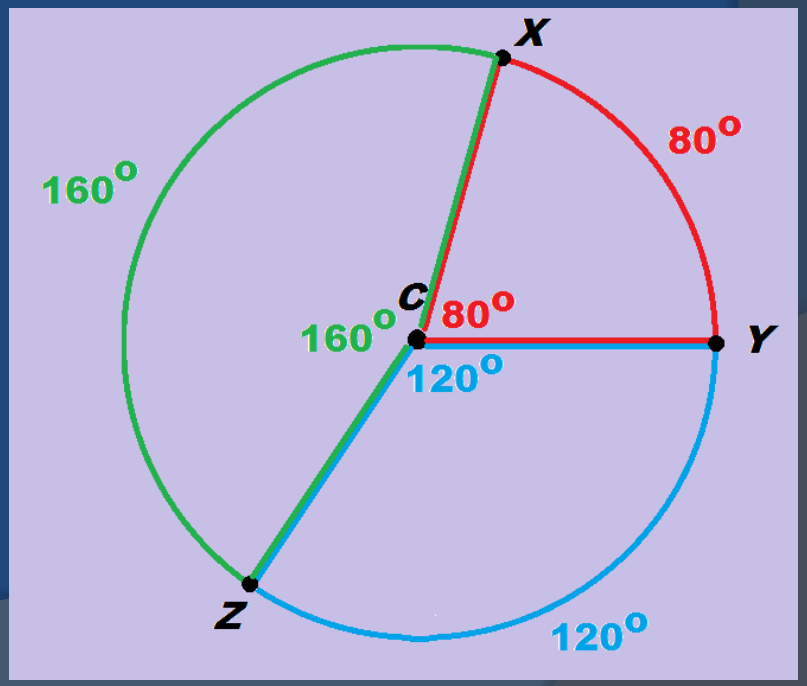
- m $\overset{\frown}{ZX}$ = 160°



Major Arcs

- **Major arcs** are > 180°
- When you see three letters, follow the path of the letters… it may be a **major arc**

- m $\overset{\frown}{ZYX}$ = 200°

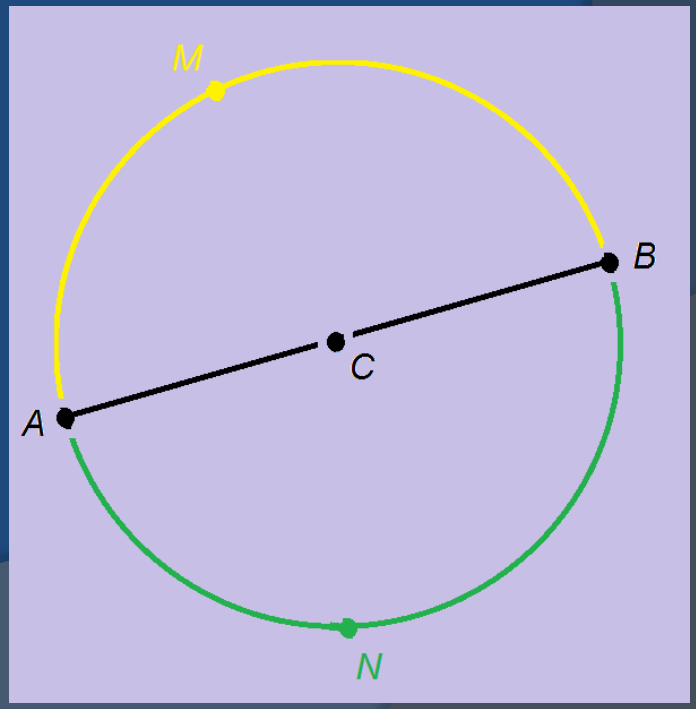


Semicircle

- A **semicircle** is an arc = 180°
- Do you see that the central angles are also 180°?

- m $\overset{\frown}{AMB}$ = 180°

- m $\overset{\frown}{ANB}$ = 180°



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