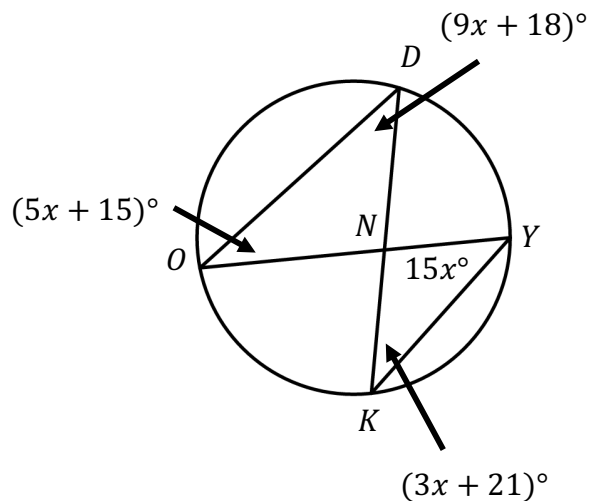


**Circles – Part 2**  
**Arcs and Inscribed Angles – Part 2**  
**Independent Practice**

1. Consider the circle on the right.

Part A: Determine the value of  $x$ .



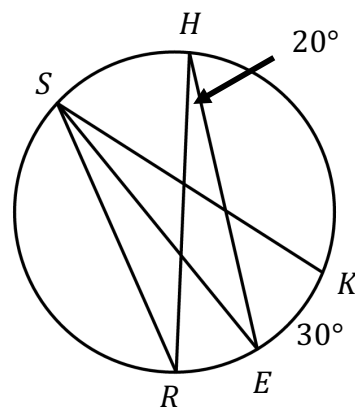
Part B: Determine  $m\angle YNK$

- (A)  $105^\circ$
- (B)  $122.5^\circ$
- (C)  $126^\circ$
- (D)  $120^\circ$

2. Consider the circle on the right, where  $m\angle RHE = 20^\circ$  and  $m\widehat{EK} = 30^\circ$

Determine  $m\angle RSK$ .

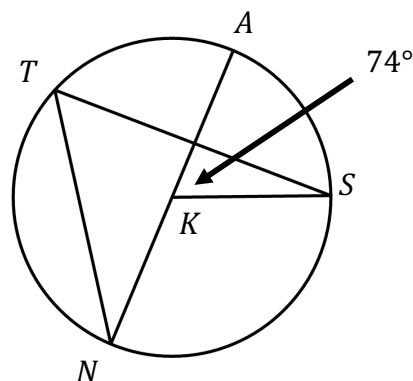
- (A)  $25^\circ$
- (B)  $35^\circ$
- (C)  $50^\circ$
- (D)  $70^\circ$



3. Consider circle K on the right, where  $m\angle SKA = 74^\circ$ .

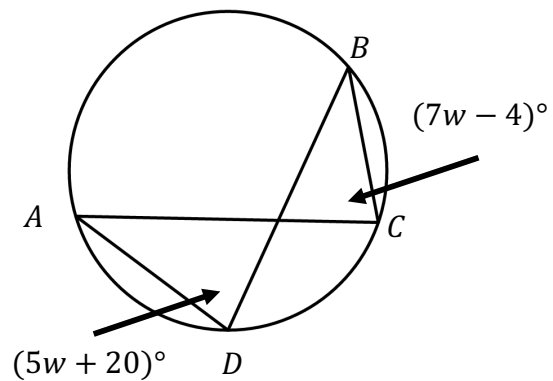
Determine  $m\angle NTS$ .

- (A)  $37^\circ$
- (B)  $74^\circ$
- (C)  $53^\circ$
- (D)  $106^\circ$

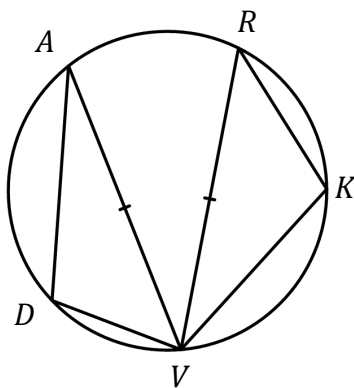


4. Consider the circle on the right.

Determine  $m\widehat{AB}$ .



5. Consider the following figure where  $\overline{VA} \cong \overline{RV}$ .



Which of the following statements is correct?

- Ⓐ  $\angle VDA \cong \angle VKR$
- Ⓑ  $\widehat{RKV} = \widehat{ARK}$
- Ⓒ  $m\angle VKR = \widehat{VKR}$
- Ⓓ  $\angle DAV \cong \angle KRV$