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## 10-3 Practice

## Arcs and Chords

ALGEBRA Find the value of $x$ in each circle.
1.

2.

7
145
3.

4. $\odot R \cong \odot S$

4.5
8

The radius of $\odot N$ is $18, N K=9$, and $m \overparen{D E}=120$. Find each measure.

## 5. $m \overparen{G E} 60$

6. $m \angle H N E 60$
7. $m \angle H E N 30$
8. $H N 9$

9. In $\odot P, Q R=7 x-20$ and
$T S=3 x$. What is $x$ ?

10. $\operatorname{In} \odot K, \overline{J L} \cong \overline{L M}, K N=3 x-2$, and $K P=2 x+1$. What is $x$ ?


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11. GARDEN PATHS A circular garden has paths around its edge that are identified by the given arc measures. It also has four straight paths, identified by segments $\overline{A C}, \overline{A D}, \overline{B E}$, and $\overline{D E}$, that cut through the garden's interior.
Which two straight paths have the same length?


