8.

Given: \( \odot E \)
\( AB = CD \)

Prove: \( BD = AC \)

```
<table>
<thead>
<tr>
<th>Statements</th>
<th>Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

9.

What fractional part of a circle is an arc that measures

a. 8

b. 144
10.

Find the measure of an arc that is

a. \( \frac{3}{5} \) of a \( \odot \)

c. 70% of its \( \odot \)

12.

Find the length of a chord that cuts off an arc measuring 60° in a \( \odot \) with radius 12.

13a.

Find the length of an arc that is \( \frac{5}{8} \) of the circumference of a circle with radius 12.
13b. 

Find the length of an arc that has a measure of $270^\circ$ and is part of a circle with radius 12

18. 

A polygon is inscribed in a $\odot$ if all of its vertices lie on the $\odot$. Find the measure of the arc cut off by a side of each of the following inscribed polygons.

a. A regular hexagon 

b. A regular pentagon 

c. A regular octagon
19.

Point P is located at (-5, 5).

a. Find the radius of $\odot O$

b. Find the measure of $\widehat{PQ}$

24.

Given: $\odot P = \odot Q$

$XY = 8$

$RP = QS = 1$

Find: $PQ$