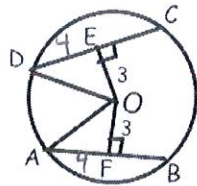


Geometry
Homework: Arcs and Chords

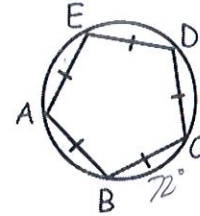
Name: Key
Date: _____

Find the indicated value.

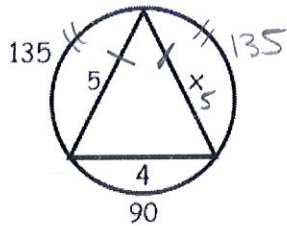
1. $AB = 8$
 $DE = 4$, $AO = 5$
 $4^2 + 3^2 = X^2$
 $25 = X^2$



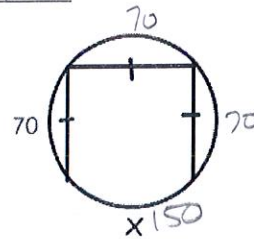
2. $m\widehat{BC} = 72^\circ$
 $\frac{360}{5} = 72^\circ$



3. $x = 5$

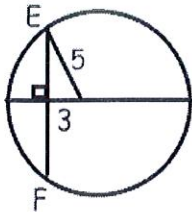


4. $x = 150^\circ$



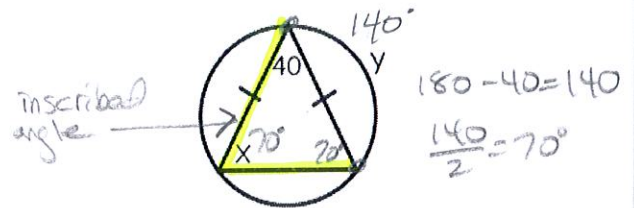
$360 - 210 = 150$

5. $EF = 8$



$3^2 + X^2 = 5^2$
 $X^2 = 16$
 $X = 4$

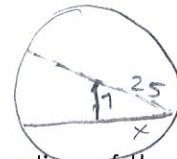
6. $x = 70^\circ$, $y = 140^\circ$



7. A chord is 7cm from the center. The diameter is 50 cm. Find the length of the chord.

$7^2 + X^2 = 25^2$
 $49 + X^2 = 625$
 $X^2 = 576$
 $X = 24$

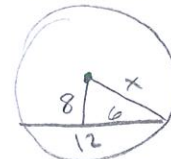
48 cm



8. A 12 cm chord is 8 cm from the center. Find the length of the radius of the circle.

$8^2 + 6^2 = X^2$
 $64 + 36 = X^2$
 $100 = X^2$
 $X = 10$

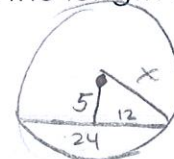
10 cm



9. A chord of a circle is 5 in. from the center and is 24 in. long. Find the length of the radius.

$5^2 + 12^2 = X^2$
 $25 + 144 = X^2$
 $169 = X^2$
 $X = 13$

13 in



10. A chord is 16 in. long and is 6 in. from the center. Find the length of the radius.

$6^2 + 8^2 = X^2$
 $36 + 64 = X^2$
 $100 = X^2$

X = 10 in

