12-1

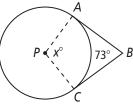
Standardized Test Prep

Tangent Lines

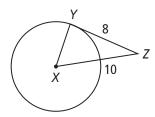
Multiple Choice

For Exercises 1-5, choose the correct letter.

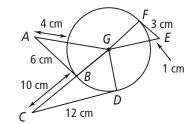
- **1.** \overline{AB} and \overline{BC} are tangents to $\bigcirc P$. What is the value of x?
 - A 73
- © 117
- **B** 107
- D 146



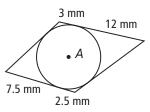
- **2.** Earth's radius is about 4000 mi. To the nearest mile, what is the distance a person can see on a clear day from an airplane 5 mi above Earth?
 - € 63 mi
- © 200 mi
- ① 4000 mi
- **◯** 5660 mi
- **3.** \overline{YZ} is a tangent to $\bigcirc X$, and X is the center of the circle. What is the length of the radius of the circle?
 - A 4
- **©** 12
- B 6
- D 12.8



- **4.** The radius of $\bigcirc G$ is 4 cm. Which is a tangent of $\bigcirc G$?
 - $\bigcirc F \overline{AB}$
- \bigcirc H \bigcirc \overline{BF}
- $\bigcirc \overline{CD}$
- \bigcirc \overline{FE}



- **5.** $\bigcirc A$ is inscribed in a quadrilateral. What is the perimeter of the quadrilateral?
 - **A** 25 mm
- © 60 mm
- **B** 50 mm
- ① 150 mm



Short Response

6. Given: \overline{GI} is a tangent to $\bigcirc J$.

Prove: $\triangle FGH \cong \triangle FIH$

