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## 12-1 <br> Standardized Test Prep <br> Tangent Lines

## Multiple Choice

## For Exercises 1-5, choose the correct letter.

1. $\overline{A B}$ and $\overline{B C}$ are tangents to $\odot P$. What is the value of $x$ ?
(A) 73
(C) 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?
(F) 63 mi
(G) 200 mi
(H) 4000 mi
(I) 5660 mi
3. $\overline{Y Z}$ is a tangent to $\odot X$, and $X$ is the center of the circle. What is the length of the radius of the circle?
(A) 4
(C) 12
(B) 6
(D) 12.8

4. The radius of $\odot G$ is 4 cm . Which is a tangent of $\odot G$ ?
(F) $\overline{A B}$
(H) $\overline{B F}$
(G) $\overline{C D}$
(1) $\overline{F E}$

5. $\odot A$ is inscribed in a quadrilateral. What is the perimeter of the quadrilateral?
(A) 25 mm
(C) 60 mm
(B) 50 mm
(D) 150 mm


## Short Response

6. Given: $\overline{G I}$ is a tangent to $\odot J$.

Prove: $\triangle F G H \cong \triangle F I H$


