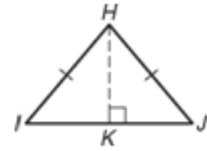


LESSON
4-8

Practice B
Isosceles and Equilateral Triangles

An altitude of a triangle is a perpendicular segment from a vertex to the line containing the opposite side. Write a paragraph proof that the altitude to the base of an isosceles triangle bisects the base.

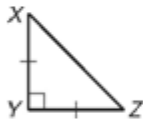


1. **Given:** $\overline{HI} \cong \overline{HJ}$, $\overline{HK} \perp \overline{IJ}$

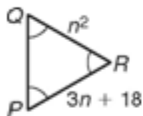
Prove: \overline{HK} bisects \overline{IJ} .

2. An obelisk is a tall, thin, four-sided monument that tapers to a pyramidal top. The most well-known obelisk to Americans is the Washington Monument on the National Mall in Washington, D.C. Each face of the pyramidal top of the Washington Monument is an isosceles triangle. The height of each triangle is 55.5 feet, and the base of each triangle measures 34.4 feet. Find the length, to the nearest tenth of a foot, of one of the two equal legs of the triangle.
- _____

Find each value.



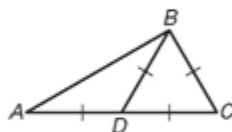
3. $m\angle X =$ _____



5. $PQ =$ _____



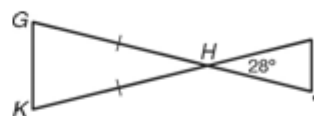
7. $t =$ _____



9. $m\angle A =$ _____



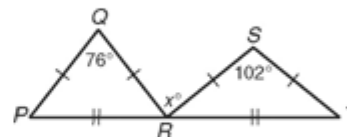
4. $BC =$ _____



6. $m\angle K =$ _____



8. $n =$ _____



10. $x =$ _____