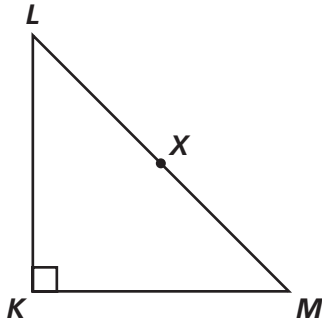


GRADE 10 Focus on Sunshine State Standards: Benchmark Tests
MA.912.G.4.2 Benchmark Pre-Test (Multiple Choice)

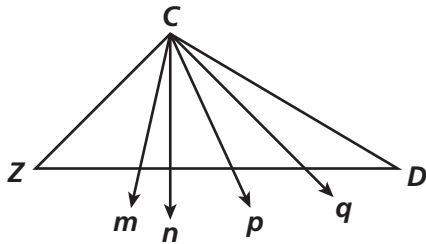
1. Use the isosceles right triangle below.



In which point are the altitudes concurrent?

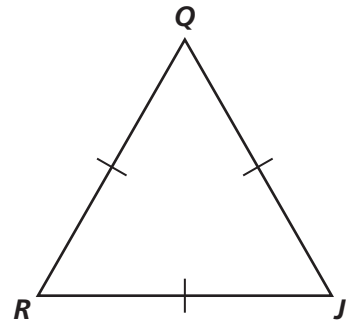
- A. *K*
- B. *L*
- C. *M*
- D. *X*

2. Which ray appears to be the altitude from *C* in $\triangle ZCD$?



- F. *m*
- G. *n*
- H. *p*
- I. *q*

3. Use the equilateral triangle below.



Which of the following is true?

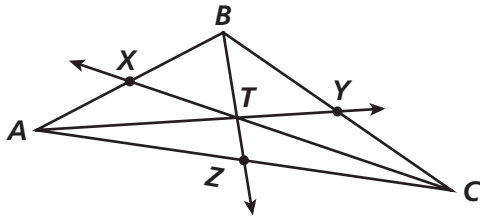
- A. The angle bisectors are concurrent in a point outside the triangle.
- B. The angle bisectors are concurrent in a point on the triangle but not at a vertex.
- C. The angle bisectors are concurrent in a point inside the triangle.
- D. The angle bisectors are concurrent in a vertex of the triangle.

4. Which of the following would you do in order to see if the altitudes of a triangle intersect in one point?

- F. From each vertex, draw a ray perpendicular to the side opposite that vertex.
- G. From each vertex, draw a ray to the midpoint of the side opposite.
- H. At each vertex, draw a ray that bisects that angle.
- I. At the midpoint of each side, draw a line perpendicular to that side.

GRADE 10 Focus on Sunshine State Standards: Benchmark Tests
MA.912.G.4.2 Benchmark Pre-Test (Multiple Choice)

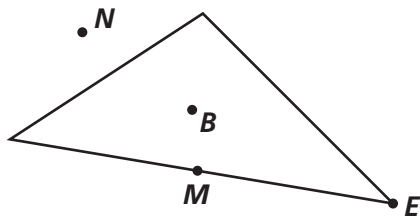
5. In the triangle below, X , Y , and Z are the midpoints of the sides of the triangle.



Which BEST describes the rays that are concurrent in T ?

- A. altitudes
- B. perpendicular bisectors
- C. angle bisectors
- D. medians

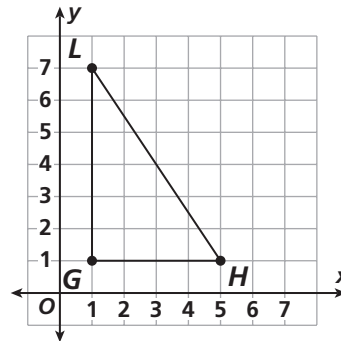
6. Use the triangle below.



Which of the following points could be the point of concurrence of the medians of the triangle?

- F. M
- G. E
- H. B
- I. N

7. What are the coordinates of the point P in which the perpendicular bisectors of $\triangle GLH$ are concurrent?



- A. $P(3, 4)$
- B. $P(3, 1)$
- C. $P(1, 1)$
- D. $P(3, 5)$

8. City planners want to put a fountain inside a park. The triangle $\triangle XYZ$ represents the park. The location of the fountain is to be equidistant from the midpoints of the three sides of the triangular park. Which lines should they draw on their plans?

- F. altitudes
- G. perpendicular bisectors
- H. angle bisectors
- I. medians