

TEST YOUR SKILLS

1 Complete using «always», «sometimes», or «never»:
«If a theorem is true, its converse is true».

2 Five lines are concurrent at a point P . How many distinct pairs of vertical angles are formed at P ?
(USA Southeast Missouri State University: Math Field Day, 2006)

3 TEST If \hat{A} and \hat{B} are supplementary, and \hat{A} and \hat{C} are complementary, then:
I. $\hat{A} < \hat{R}, \hat{B} > \hat{R}$, and $\hat{C} < \hat{R}$.
II. $\hat{A} < \hat{B}$ and $\hat{C} < \hat{R}$.
III. $\hat{A} > \hat{R}$ and $\hat{C} < \hat{B}$.

Which of the above statements is true?

- ☐ **A** I only. ☐ **D** II and III only.
☐ **B** II only. ☐ **E** I and II only.
☐ **C** III only.

(USA Northern State University: 50th Annual Mathematics Contest, 2003)

4 TEST Which of the following is true of a line but not true of a segment?

- ☐ **A** Has exactly two end points.
☐ **B** Is named by two end points.
☐ **C** Has no end points.
☐ **D** Has a midpoint.
☐ **E** None of these answers.

(USA Northern State University: 48th Annual Mathematics Contest, 2001)

5 TEST Which of the following statements is true of a ray but not true of a segment?

- ☐ **A** Can be named by two points.
☐ **B** Extends indefinitely in two directions.
☐ **C** Has a definite length.
☐ **D** Has two endpoints.
☐ **E** Has only one endpoint.

(USA Northern State University: 50th Annual Mathematics Contest, 2003)

GLOSSARY

angle: angolo

complementary: complementare

concurrent: incidente

converse: inverso

end point: estremo

length: lunghezza

line: retta

midpoint: punto medio

to name: determinare, designare

segment: segmento

statement: proposizione

supplementary: supplementare

theorem: teorema

vertical, vertically opposite: (angoli) opposti al vertice