Directions: Prove each shape is a right triangle by showing that the triangle has a right angle.
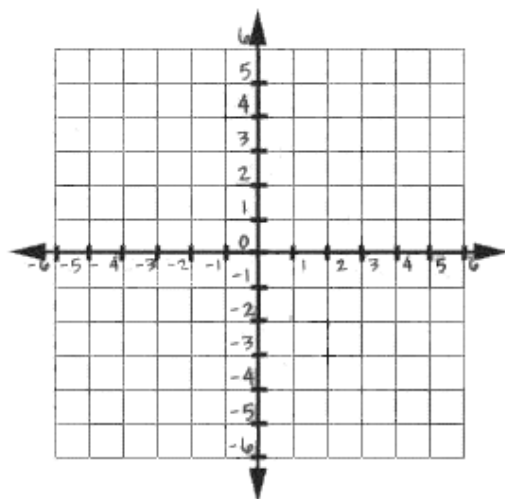
1) *Given:* A(1, 1), B(4, 4), & C(5, −3)
   Prove : ABC is a right triangle
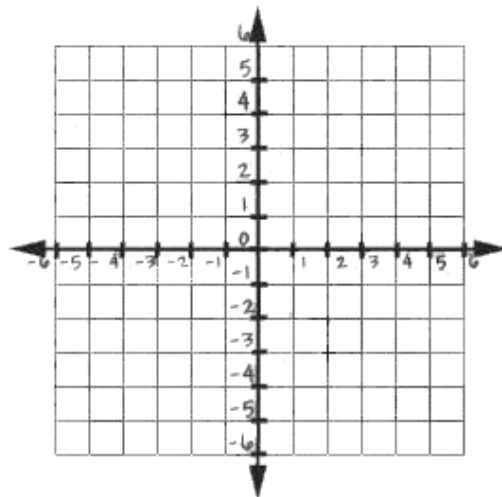
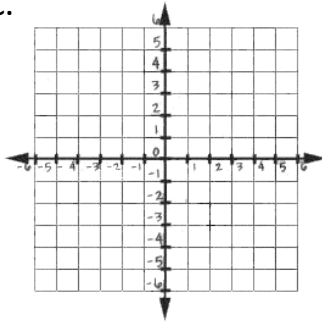

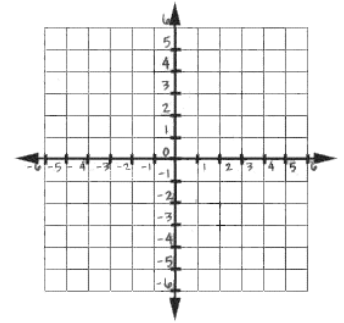2) *Given:* D(−2, 2), E(1, 4), & F(3, 1)
   Prove: DEF is a right triangle

Directions: If $\overline{AC}$ is the hypotenuse of a right triangle, find two ordered pairs that could represent Point B in ΔABC.

3) A(2, 3) and C(−3, −2)

4) A(−1, −1) & C(0, 2)

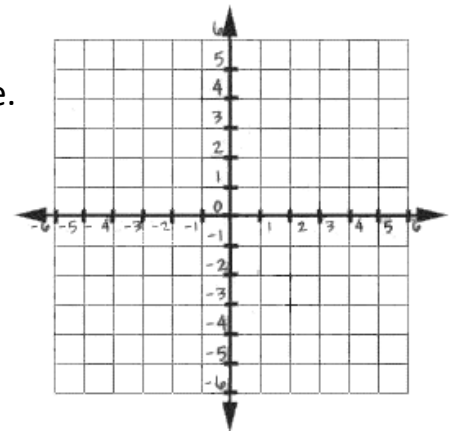**Directions: Prove each triangle is a right triangle by using Pythagorean Theorem.**

5) A(0, 1), B(5, 2), & C(3, 4)

6) A(−2, −3), B(−1, 1), & C(3, 0)

Directions: Complete each proof.

7) Prove that D(−2, −2), E(5, −1), F(1, 2) is an isosceles right triangle.

8) Prove that M(−2, 4), N(4, 4), P(−2, −4) is a scalene right triangle.