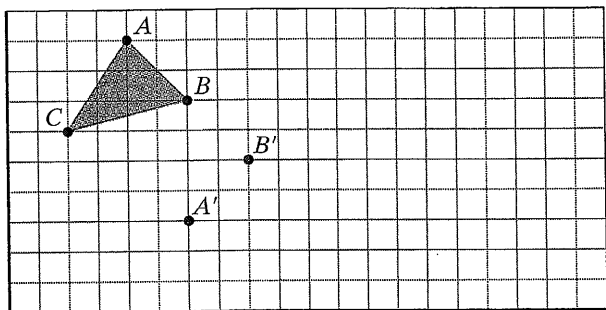**16.** Given a rotation that moves the point A to the point A' and the point B to the point B' as shown in the following figure, find

(a) the rotocenter.

(b) the image of triangle ABC under the rotation.
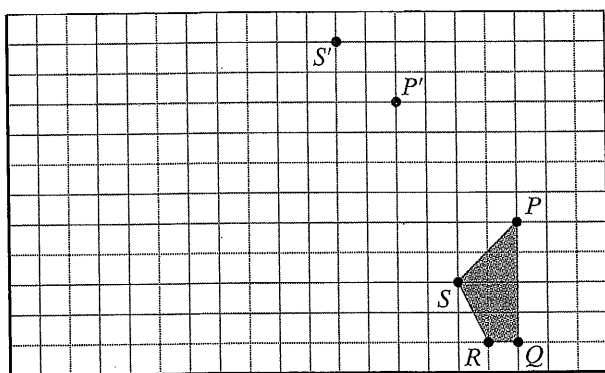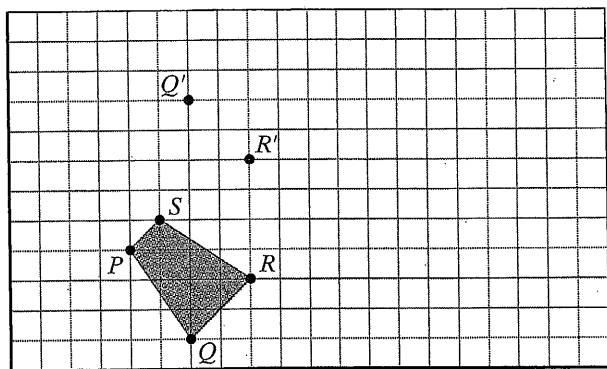

17. Given a rotation that moves the point P to the point P' and the point S to the point S' as shown in the following figure, find

(a) the rotocenter.

(b) the angle of rotation.

(c) the image of quadrilateral $PQRS$ under the rotation.
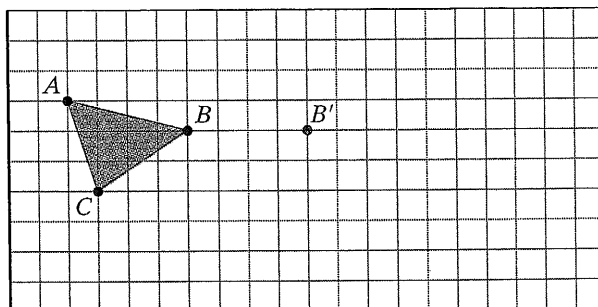

18. Given a rotation that moves the point Q to the point Q' and the point R to the point R' as shown in the following figure, find

(a) the rotocenter.

(b) the angle of rotation.

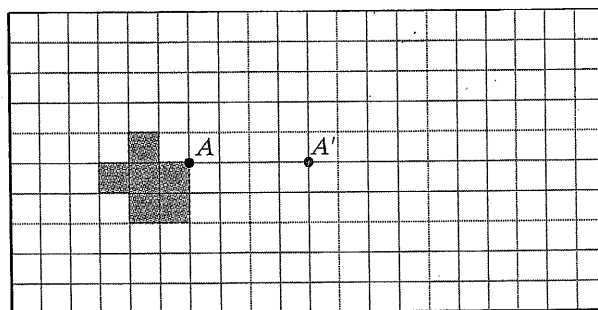(c) the image of quadrilateral $PQRS$ under the rotation.

19. Given a 90° clockwise rotation that moves the point B to the point B' as shown in the following figure, find

(a) the rotocenter.

(b) the image of triangle ABC under the rotation.

20. Given a half-turn (180° rotation) that moves the point A to the point A' as shown in the following figure, find

(a) the rotocenter.

(b) the image of the shaded region under the rotation.

C. Translations

21. Which point in the following figure is the image of P under

(a) the translation with vector v_1?

(b) the translation with vector v_2?

(c) the translation with vector v_3?

(d) the translation with vector v_4?