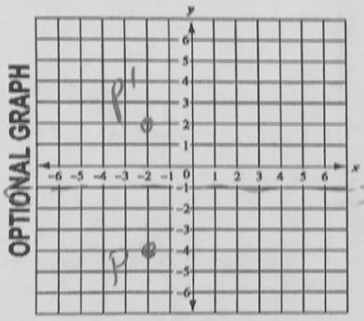
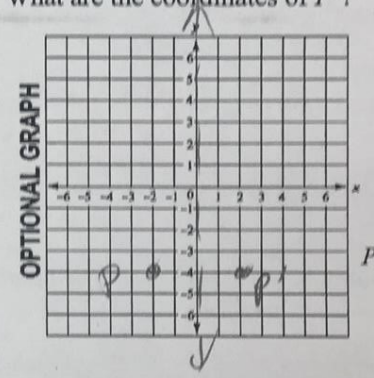
UNIT 3

38. Point $P(-2, -4)$ is reflected in the line $y = -1$. What are the coordinates of P'?



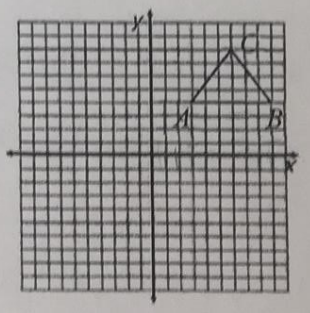
P' (-2, 2)

39. Point $P(-2, -4)$ is reflected in the line *y-axis*. What are the coordinates of P'?



P' (2, -4)

40. Find the image of ΔABC after the transformation described.
Translation: $(x, y) \rightarrow (x, y + 1)$; Reflection: in $x = 1$.



A(3, 4) → A'(3 , 5) → A''(-1 , 5)

B(9, 4) → B'(9 , 5) → B''(-7 , 5)

C(6, 8) → C'(6 , 9) → C''(-4 , 9)

41. Rotate point $A(-2, 5)$ …

(x, y) ↺ (-y, x) ↺ (-x, -y) ↺ (y, -x)

a. 90° cw about the origin

A'(5, 2)

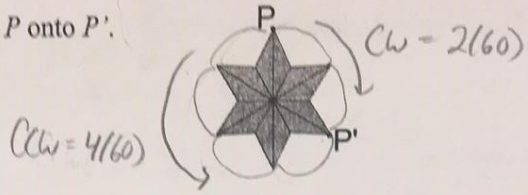
b. 180° cw about the origin

A'(2, -5)

c. 90° ccw about the origin

A'(-5, -2)

42. Find the angle of rotation that maps P onto P'.



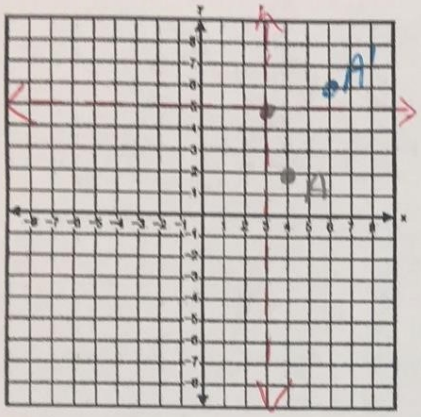
$360 \div 6 = 60°$

Magnitude = 60°

120 ° cw 240 ° ccw

43. Rotate $A(4, 2)$ 90° counterclockwise about (3, 5)

90° CCW (-y, x)

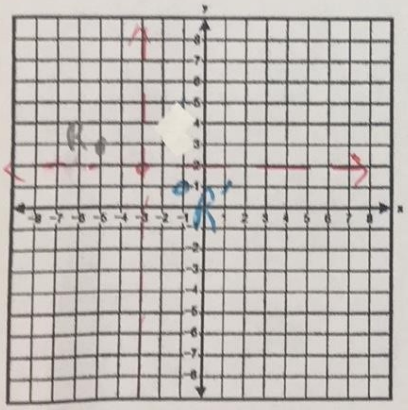


Fake A (1, -3)

Fake A' (3, 1)

Real A' (6, 6)

44. Rotate $R(-5, 3)$ 180° clockwise about (-3. 2) 180° CW (-x, -y)



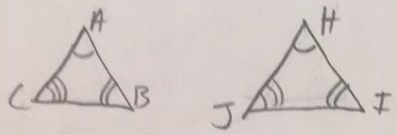
Fake R (-2, 1)

Fake R' (2, -1)

Real R' (-1, 1)

UNIT 4

45. Given $\Delta ABC \cong \Delta HIJ$, complete the statements below. Draw a diagram to help.



a) $\angle I \cong \angle$ B

b) $\overline{CA} \cong \overline{JH}$

c) $\Delta IHJ \cong \Delta$ BAC