

## CAPTAIN NOGWILER'S TREASURE: INSTRUCTIONS

- 1a** Reflect  $\triangle ABC$  in axis y.
- 1b** Label reflected image  $\triangle A', B', C'$
- 1c** Record the coordinates for  $\triangle A', B', C'$

- 2a** Draw a line segment from  $(-12, 3)$  to  $(2, 3)$ .
- 2b** Label the point  $(-12, 3)$  Q.
- 2c** Label the point  $(2, 3)$  P.

- 3a** Reflect  $\triangle A'B'C'$  in the line segment  $\overline{QP}$
- 3b** Label the reflected image  $\triangle A''B''C''$
- 3c** Record the coordinates for  $\triangle A''B''C''$

- 4a** Reflect  $\triangle A''B''C''$  in the x axis
- 4b** Label the reflected image  $\triangle A'''B'''C'''$
- 4c** Record the coordinates for  $\triangle A'''B'''C'''$

- 5a** Reflect  $\triangle A'''B'''C'''$  in y axis
- 5b** Label the reflected image  $\triangle A^{''''}B^{''''}C^{''''}$
- 5c** Record the coordinates for  $\triangle A^{''''}B^{''''}C^{''''}$

**6a** Reflect  $\triangle A'''B'''C'''$  in  $x$  axis

**6b** Label the reflected image

$\triangle A''''B''''C''''$

**6c** Record the coordinates for this reflected image

**7** Draw a line segment joining  $B''''$  and  $B'''$

**8a** Draw a line segment from  $B'''$  to  $(-12, 0)$

**8b** Label point  $(-12, 0)$  H

**9** Find the point at which line segment  $\overline{B''''B''}$  intersects line segment  $\overline{B'''H}$

**10** This intersection point is where the treasure of Captain Nogwiler is hidden.  
Record the coordinates of this intersection.

you are now finished.