



## Puzzle Time

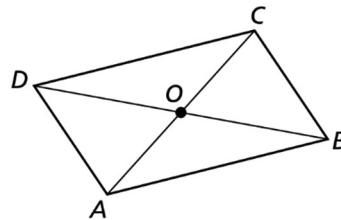
### What Kind Of Ship Can Last Forever?

Circle the letter of each correct answer in the boxes below. The circled letters will spell out the answer to the riddle.

**Complete the sentence.**

- If both pairs of opposite sides of a quadrilateral are \_\_\_\_\_, then the quadrilateral is a parallelogram.
- If both pairs of opposite angles of a quadrilateral are congruent, then the quadrilateral is a \_\_\_\_\_.
- If one \_\_\_\_\_ of opposite sides of a quadrilateral are congruent and parallel, then the quadrilateral is a parallelogram.
- If the diagonals of a quadrilateral \_\_\_\_\_ each other, then the quadrilateral is a parallelogram.
- A quadrilateral is \_\_\_\_\_ a parallelogram.

**Find the indicated measure or find the value of  $x$  that would make the figure a parallelogram.**



- $m\angle CDA = m\angle CBA = 72^\circ$ ,  $m\angle DAB = m\angle DCB$ . Find  $m\angle DAB$ .
- $m\angle DAB = m\angle DCB = 89^\circ$ ,  $m\angle CDA = m\angle CBA$ . Find  $m\angle CDA$ .
- $DO = 12$ ,  $BO = 12$ ,  $AO = 16$ . Find  $CO$ .
- $DC = 4x + 2$ ,  $AB = 5x - 3$ ,  $AD = CB$ . Find  $x$ .
- $AD = 2x + 1$ ,  $CB = x + 8$ ,  $DC = AB$ . Find  $x$ .

<b>F</b> 108°	<b>A</b> 89°	<b>R</b> always	<b>O</b> equal	<b>R</b> congruent	<b>N</b> side	<b>I</b> sometimes	<b>M</b> 12	<b>S</b> 72°	<b>E</b> parallelogram
<b>I</b> supplementary	<b>G</b> 6	<b>N</b> pair	<b>F</b> intersect	<b>D</b> 16	<b>S</b> 91°	<b>H</b> bisect	<b>E</b> 24	<b>I</b> 7	<b>P</b> 5