Name:

Date:

School:

Facilitator:

7.04 Proving Quadrilaterals are Parallelograms

Total Points: 26

Problems #1-5 are worth 2 points: 1 point per answer blank.

Problems #6-7 are worth 8 points each: 3 points for statement summary and 5 points for work.

**Is there enough information to prove the quadrilateral is a parallelogram? Explain your reasoning.**

|  |  |  |
| --- | --- | --- |
| A Quadrilateral • The top side and bottom side both have parallel marks on them. • The top side and bottom side both have one tick mark on them.   |  | A Quadrilateral • The diagonals are drawn in the quadrilateral. • The first diagonal has one tick mark on each of its two segments. The second diagonal has two tick marks on each of its two segments. |
| **1. Is it a parallelogram, or can you tell?**      **Explanation:**       |  | **2. Is it a parallelogram, or can you tell?**      **Explanation:**       |
|  |  |  |
| A Quadrilateral • The measure of the angle in the upper left corner is 130 degrees. • The measure of the angle in the upper right is 50 degrees. • The measure of the angle in the bottom left corner is 50 degrees. • The measure of the angle in the bottom right corner is not given.    |  | A Quadrilateral • The top side and bottom side both have a parallel mark on them. |
| **3. Is it a parallelogram, or can you tell?**      **Explanation:**       |  | **4. Is it a parallelogram, or can you tell?**      **Explanation:**       |
|  |  |  |
| A Quadrilateral • The top and bottom sides both have one tick mark on them. • The left and right sides both have two tick marks on them.  |  |  |
| **5. Is it a parallelogram, or can you tell?**      **Explanation:**       |  |  |

**6)** Show that C (2, -1), D (1, 3), E (6, 5), F (7, 1) are vertices of a parallelogram. Show your work.

**Summary Statement:**

Show your work below.

**7)** Show that A (2, 5), B (8, 4), C (9, -4), D (3, -3) are vertices of a parallelogram. Show your work.

**Summary Statement:**

Show your work below