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| \*Learning Target: |
| \*Critical Content: |

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| **Parallelogram** | A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with \_\_\_\_\_\_\_\_\_\_\_ pairs of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sides \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.To name a parallelogram, use the symbol \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| **Properties of Parallelograms** |
| **1)**  | If a quadrilateral is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sides are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| **2)**  | If a quadrilateral is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then its opposites \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| **3)**  | If a quadrilateral is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| **4)**  | If a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has one \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ angle, then it has \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ angles. |

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| **Examples** | 1) In $▭ABCD$, suppose $m∠A=55, AB=2.5 ft, BC=1 ft.$ Find each measure.a) $DC$ b) $m∠B$ c) $m∠C$  |

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| **Diagonals of Parallelograms** |
| **1)**  | If a quadrilateral is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ each other. |
| **2)**  | If a quadrilateral is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, then each \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ separates the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into \_\_\_\_\_\_\_ congruent \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |

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| **Examples** | 2) If QRST is a parallelogram, find the value of the indicated variable. a) x b) y c) z   |
|  | 3) Determine the coordinates of the intersection of the diagonals of $▭FGHJ$ with vertices F(-2, 4), G(3, 5), H(2, -3), and J(-3, -4).3) Determine the coordinates of the intersection of the diagonals of RSTU with vertices R(-8, -2), S(-6, 7), T(6, 7), and U(4, -2). |