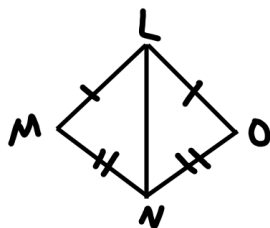


Name: \_\_\_\_\_ Date: \_\_\_\_\_

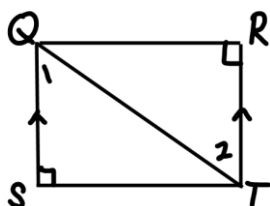
**Matching: Use the choices listed at the bottom in the box for problems #1 – 4**

Problem 1:



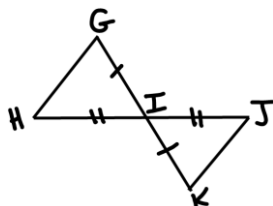
| Statement                              | Reason   |
|--|----------|
| 1. $\overline{LM} \cong \overline{LO}$ | 1. Given |
| 2. $\overline{MN} \cong \overline{ON}$ | 2. Given |
| 3. $\overline{LN} \cong \overline{LN}$ | 3.       |
| 4. $\triangle LMN \cong \triangle LON$ | 4.       |

Problem 2:



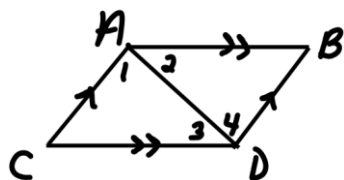
| Statement                                  | Reason   |
|--|----------|
| 1. $\overline{QS} \parallel \overline{RT}$ | 1. Given |
| 2. $\angle R \cong \angle S$               | 2. Given |
| 3. $\angle 1 \cong \angle 2$               | 3.       |
| 4. $\overline{QT} \cong \overline{QT}$     | 4.       |
| 5. $\triangle QST \cong \triangle TRQ$     | 5.       |

Problem 3:



| Statement                              | Reason   |
|--|----------|
| 1. $\overline{GI} \cong \overline{KI}$ | 1. Given |
| 2. $\overline{HI} \cong \overline{JI}$ | 2. Given |
| 3. $\angle GIH \cong \angle KIJ$       | 3.       |
| 4. $\triangle GIH \cong \triangle KIJ$ | 4.       |

Problem 4:



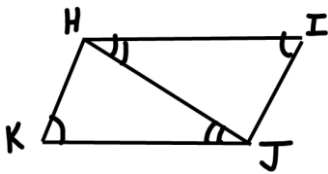
| Statement   | Reason   |
|---|----------|
| 1. $\overline{AC} \parallel \overline{BD}, \overline{AB} \parallel \overline{CD}$ | 1. Given |
| 2. $\angle 1 \cong \angle 4, \angle 2 \cong \angle 3$                             | 2.       |
| 3. $\overline{AD} \cong \overline{AD}$  | 3.       |
| 4. $\triangle ADC \cong \triangle DAB$  | 4.       |

**Choices for problems #1 – 4 (some will be used more than once):**

- AAS
- ASA
- Alternate Interior Angles are  $\cong$
- Reflexive Property
- SAS
- SSS
- Vertical Angles are  $\cong$

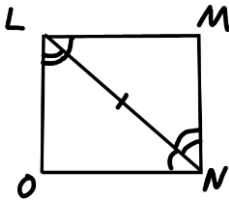
Fill in the blank proofs:

Problem 5:



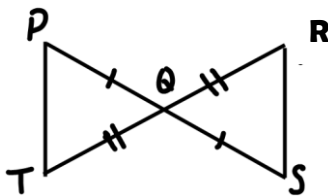
| Statement                              | Reason   |
|--|----------|
| 1. $\angle I \cong \angle K$           | 1. Given |
| 2. $\angle IHJ \cong \angle KJH$       | 2. Given |
| 3. $\overline{HJ} \cong \overline{HJ}$ | 3.       |
| 4. $\triangle HJK \cong \triangle HJI$ | 4.       |

Problem 6:



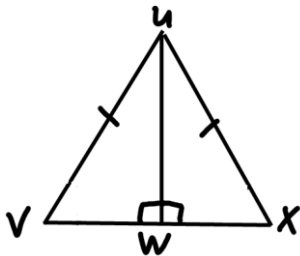
| Statement   | Reason                |
|---|-----------------------|
| 1. $\angle MLN \cong \angle ONL$                      | 1. Given              |
| 2. $\angle OLN \cong \angle \underline{\hspace{1cm}}$ | 2. Given              |
| 3.  | 3. Reflexive Property |
| 4. $\triangle LNO \cong \triangle LNM$                | 4.                    |

Problem 7:



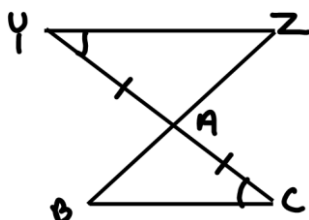
| Statement                              | Reason   |
|--|----------|
| 1. $\overline{PQ} \cong \overline{RS}$ | 1. Given |
| 2.                                     | 2. Given |
| 3. $\angle PQT \cong \angle RSQ$       | 3.       |
| 4. $\triangle PQT \cong \triangle RSQ$ | 4.       |

Problem 8:



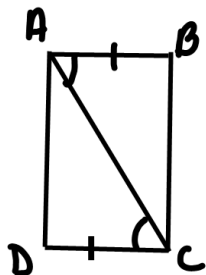
| Statement                              | Reason                |
|--|-----------------------|
| 1. $\overline{UV} \cong \overline{UX}$ | 1. Given              |
| 2. $\angle VWU \cong \angle XWU$       | 2. Given              |
| 3.                                     | 3. Reflexive Property |
| 4. $\angle V \cong \angle X$           | 4.                    |
| 5. $\triangle UWV \cong \triangle UWX$ | 5..                   |

Problem 9:



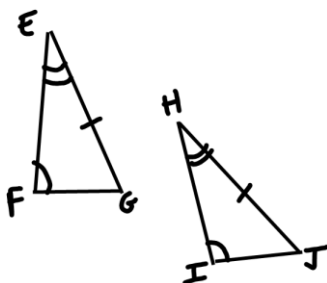
| Statement                              | Reason                         |
|--|--------------------------------|
| 1. $\angle Y \cong \angle C$           | 1.                             |
| 2.                                     | 2. Given                       |
| 3.                                     | 3. Vertical Angles are $\cong$ |
| 4. $\triangle YZA \cong \triangle CBA$ | 4.                             |

Problem 10:



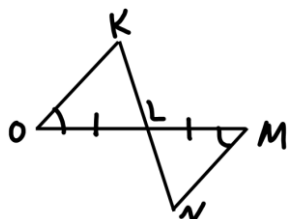
| Statement                              | Reason   |
|--|----------|
| 1. $\angle BAC \cong \angle DCA$       | 1. Given |
| 2.                                     | 2. Given |
| 3.                                     | 3.       |
| 4. $\triangle ABC \cong \triangle CDA$ | 4.       |

Problem 11:



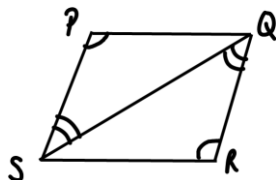
| Statement                              | Reason |
|--|--------|
| 1. $\angle F \cong \angle I$           | 1.     |
| 2. $\angle \_ \cong \angle \_$         | 2.     |
| 3.                                     | 3.     |
| 4. $\triangle EFG \cong \triangle HIJ$ | 4.     |

Problem 12:



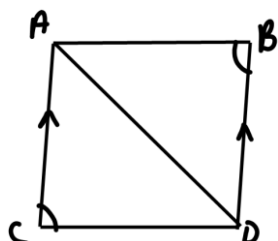
| Statement                              | Reason   |
|--|----------|
| 1. $\angle \_ \cong \angle M$          | 1. Given |
| 2.                                     | 2. Given |
| 3. $\angle KLO \cong \angle \_$        | 3.       |
| 4. $\triangle KLO \cong \triangle NLM$ | 4.       |
| 5. $\angle K \cong \angle N$           | 5. CPCTC |

Problem 13:



| Statement                              | Reason       |
|--|--------------|
| 1. $\angle P \cong \angle \_$          | 1. Given     |
| 2.                                     | 2. Given     |
| 3.                                     | 3. Reflexive |
| 4. $\triangle PQS \cong \triangle RSQ$ | 4.           |

Problem 14:



| Statement                                  | Reason                |
|--|-----------------------|
| 1. $\overline{AC} \parallel \overline{BD}$ | 1. Given              |
| 2.   | 2. Given              |
| 3. $\angle CAD \cong \angle BDA$           | 3.                    |
| 4.   | 4. Reflexive Property |
| 5. $\triangle ACD \cong \triangle \_$      | 5.                    |