1. What are the FIVE ways to prove that a quadrilateral is a parallelogram?
	1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Prove that if both pairs of opposite angles of a quadrilateral are congruent, then the quadrilateral is a parallelogram.

Given: 



 Prove:  is a parallelogram

|  |  |
| --- | --- |
| **Statements** | **Reasons** |
| 1. ;
 |  |
| 1.
 |  |
| 1.
 |  |
| 1. ;
 |  |
| 1. is a parallelogram
 | 1.
 |

1. Given: Regular hexagon *JKLMNO*

Prove: *OKLN* is a parallelogram

|  |  |
| --- | --- |
| **Statements** | **Reasons** |
|  | 1. Given
 |
| 1.
 |  |
|  | 1. SAS Postulate
 |
| 1.
 |  |
|  | 1. Definition of regular polygon
 |
| 1. *OKLN* is a parallelogram
 |  |

1. Given: ;



 Prove: *MNYZ* is a parallelogram

|  |  |
| --- | --- |
| **Statements** | **Reasons** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



1. Given: 



 Prove: *ABCD* is a parallelogram

|  |  |
| --- | --- |
| **Statements** | **Reasons** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

1. Given: ; W, *X, Y, Z* are midpoints of



 Prove: *WXYZ* is a parallelogram

|  |  |
| --- | --- |
| **Statements** | **Reasons** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

1. Write a paragraph proof. (Hint: a short proof is possible if certain auxiliary segments are drawn.)

Given:;

Prove: *ACDF* is a parallelogram

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |