Statements	Reasons	Statements	Reasons
1. ΔHNS, O is the midpoint of HN, E is the midpoint of NS	1. Given	1. ΔHNS, O is the midpoint of HN, E is the midpoint of NS	1. Given
2. In a ray opposite EO, there is a point T such that OE=ET	2. In a ray, point at a given distance from the endpoint of the ray.	2. In a ray opposite EO, there is a point T such that OE=ET	2. In a ray, point at a given distance from the endpoint of the ray.
3. EN=ES	3. Definition of Midpoint	3. EN=ES	3. Definition of Midpoint
4. $\angle 2 \cong \angle 3$	4. Vertical Angle Theorem	4. $\angle 2 \cong \angle 3$	4. Vertical Angle Theorem
5. $\Delta ONE \cong \Delta TSE$	5. SAS Congruence Postulate	5. $\Delta ONE \cong \Delta TSE$	5. SAS Congruence Postulate
6. $\angle 1 \cong \angle 4$	6. CPCTC	6. $\angle 1 \cong \angle 4$	6. CPCTC
7. HN∥ST	7. If alternate interior angles are congruent, then the lines are parallel.	7. HN∥ST	7. If alternate interior angles are congruent, then the lines are parallel.
8. OH $\cong$ ON	8. Definition of midpoint	8. OH $\cong$ ON	8. Definition of midpoint
9. ON $\cong$ TS	9. CPCTC (SN5)	9. ON $\cong$ TS	9. CPCTC (SN5)
10. OH $\cong$ ST	10. Transitive Property	10. OH $\cong$ ST	10. Transitive Property
11. Quadrilateral HOTS is a parallelogram	11. Definition of a parallelogram	11. Quadrilateral HOTS is a parallelogram	11. Definition of a parallelogram
12. OE∥HS	12. OE is on the side of OT of parallelogram HOTS	12. OE∥HS	12. OE is on the side of OT of parallelogram HOTS
13. OE+ET=OT	13. Segment Addition Postulate (SAP)	13. OE+ET=OT	13. Segment Addition Postulate (SAP)
14. OE+OE=OT	14. Substitution (SN2 and SN 13)	14. OE+OE=OT	14. Substitution (SN2 and SN 13)
15. 2OE=OT	15. Substitution (SN14) or Addition	15. 2OE=OT	15. Substitution (SN14) or Addition
16. HS $\cong$ OT	16. Property of a parallelogram	16. HS $\cong$ OT	16. Property of a parallelogram
17. 2OE=HS	17. Substitution (SN15 and SN16)	17. 2OE=HS	17. Substitution (SN15 and SN16)
18. OE=$\frac{1}{2}$HS	18. Substitution (SN14 and SN15)	18. OE=$\frac{1}{2}$HS	18. Substitution (SN14 and SN15)