

Activity 4.4.1: Proving Inequalities in a Triangle

Total points = 31

1. Reasons
1. Given✓

2. Definition of Midpoint✓

3. Vertical Angles theorem✓

4. SAS Triangle Congruence Postulate✓

5. CPCTC✓

6. Definition of Congruent Angles✓

7. Angle Addition Postulate✓

8. Law of Substitution ✓

9. The whole is greater than its parts. ✓
2. Reasons
1. Given ✓

2. Definition of Midpoint ✓

3. Transitive Property ✓

4. Base Angles Theorem ✓

5. Angle Addition Postulate ✓

6. Law of Substitution ✓

7. The whole is greater than its parts. ✓

8. Angle-Side Relationship theorem ✓

9. Segment Addition Postulate ✓

10. Law of Substitution ✓

11. Law of Substitution ✓
3. Reasons
1. Given ✓

2. CPCTC ✓

3. Definition of Angle Bisector ✓

4. Reflexive Property ✓

5. SAS Postulate ✓

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7. Triangle Inequality theorem ✓

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