Triangle Proof Review (Week 9)

**Solve each problem and show your work in the form of a proof.**

|  |  |  |
| --- | --- | --- |
| 1. |  | 2. |
| Given: $$m∠B= ?$$ |  | Given: $$m∠DEF= ?$$ |

|  |  |  |
| --- | --- | --- |
| 3. |  | 4. |
| Given: $$m∠H= ?$$ |  | Given: $$LN= ?$$ |

|  |  |  |
| --- | --- | --- |
| 5. |  | 6. |
| Given: $$Is △PQR an equiangular triangle?$$ |  | Given: $△STV is equiangular$$$x= ?$$ |

|  |  |  |
| --- | --- | --- |
| 7. |  | 8. |
| Given: $$m∠E= ?$$ |  | Given: $x=5$$$What property, if any, proves the triangles congruent?$$ |

|  |  |  |
| --- | --- | --- |
| 9. |  | 10. |
| Given: $x=6$$$What property, if any, proves the triangles congruent?$$ |  | Given: $ x=1 \& AD=3$$$BD= ?$$ |

|  |  |  |
| --- | --- | --- |
| 11. |  | 12. |
| Given: $EF=7, FG=3, and KH=3, \& LK=7$$$What property, if any, proves the triangles congruent?$$ |  | Given: $m∠R=m∠Q, RN=2x+8, QN=3x+5, $ $\& x=3$$$What property, if any, proves thetriangles congruent?$$ |