|  |  |  |
| --- | --- | --- |
|  Given: H is the midpoint of $\overbar{QD}$ $∠M≅∠K$Prove: $∆MHQ≅∆KHD$ | Given: $\overbar{GK}≅\overbar{ML}$ $∠GKM≅∠LMK$Prove: $∠G≅∠L$ | Given: $∠STX≅∠RTX$ $\overbar{XT}$ is the median of $∆SXR$Prove: $∆STX≅∆RTX$ |
| Given: $\overbar{FT}≅\overbar{FR}$ $\overbar{ST}≅\overbar{SR}$Prove: $∆FTS≅∆FRS$ | Given: $\overbar{BR}$ bisects $\overbar{EV}$ $\overbar{EV}$ bisects $\overbar{BR}$Prove: $∆BAE ≅ ∆RAV$ | Given: O is the midpoint of$\overbar{NQ}$ $∠M≅∠P$ Prove: $∠N≅∠Q$ |
| Given: $\overbar{BC}$ bisects $\overbar{AD}$ $∠A≅∠D$Prove: $\overbar{AB}≅\overbar{DC}$ | Given: $\overbar{PR}$ is the median of $∆SPR$ $\overbar{SP}≅\overbar{SR}$Prove: $∆PSQ≅∆RSQ$ | Given: $∠1≅∠2$ $∠Q≅∠S$Prove: $\overbar{RQ}≅\overbar{RS}$ |

Tic-Tac-Toe Proofs

Directions: Complete any three proofs to form Tic-Tac-Toe!

Write your proofs on a separate sheet of paper and staple together before turning in.

1. Given: $\overbar{JG}$ is a perpendicular bisector of $∆FJH$

Prove: $∆FGJ≅∆HGJ$



1. Given: $∠K≅∠M$

$\overbar{JL}$ bisects $∠KJM$

Prove: $∠KLJ≅∠MLJ$



1. Given: $∠JGF≅∠JGH$

$\overbar{JG}$ bisects $∠FJH$

Prove: $∆FGJ≅∆HGJ$

1. Given: $\overbar{CD}$ is a perpendicular bisector of $\overbar{AB}$

Prove: $\overbar{AC}≅\overbar{BC}$