|  |  |
| --- | --- |
| Theorem 2.2Ex. 1CheckpointThrms. 2.3-2.5Ex. 2 Ex. 3 Checkpoint | Using the Transitive PropertyIn the diagram at the right, <1$≅$ <5, <5$≅$ <3, and m<1 = 103. What is the m<3? Explain. Use the diagram from Example 1.Given that <4 $≅$ <6, <6 $≅$ <8, and m<8 = 77, what is m<4? Theorem 2.3 Right Angle Congruence TheoremAll right angles are congruent.Theorem 2.4 Congruent Supplements TheoremIf two angles are supplementary to the same angle (or to congruent angles), then they are congruent.If m<1 + m<2 = 180 and m<2 + m<3 = 180, then <1 $≅$ <3.Theorem 2.5 Congruent Complements TheoremIf two angles are complementary to the same angle (or to congruent angles), then they are congruent.If m<4 + m<5 = 90 and m<5 + m<6 = 90, then <4 $≅$ <6.Proving Theorem 2.5Given:<1 and <2 are complements <3 and <4 are complements <2 $≅$ <4Prove: <1 $≅$ <3Using Linear Pairs and Vertical AnglesIn the diagram, <3 is a right angle and m<5 = 57. Find the measures of <1, <2, <3, and <4.  |