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| Theorem 2.2  Ex. 1  Checkpoint  Thrms. 2.3-2.5  Ex. 2  Ex. 3  Checkpoint | Using the Transitive Property  In 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 Theorem  All right angles are congruent.  Theorem 2.4 Congruent Supplements Theorem  If 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 Theorem  If 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 2.5  Given:<1 and <2 are complements  <3 and <4 are complements  <2 <4  Prove: <1 <3    Using Linear Pairs and Vertical Angles  In the diagram, <3 is a right angle and m<5 = 57. Find the measures of <1, <2, <3, and <4. |