2-5 Standardized Test Prep
Reasoning in Algebra and Geometry

Multiple Choice

For Exercises 1–6, choose the correct letter.

1. According to the Transitive Property of Equality, if $TX = XY$, and $XY = YZ$, then $TX = \boxed{}$.

   Ⓐ TX Ⓑ XY Ⓒ YZ Ⓓ TZ

2. What property is illustrated by the statement, if $KL = LM$, then $LM = KL?$

   Ⓕ Reflexive Property of Equality   Ⓗ Transitive Property of Equality

   Ⓖ Symmetric Property of Equality   Ⓘ Division Property of Equality

Use the list of reasons below for Exercises 3–6. Choose the correct reason for each algebraic statement.

   Ⓐ Subtraction Property of Equality   Ⓒ Distributive Property

   Ⓑ Combine like terms.   Ⓓ Division Property of Equality

Statements	Reasons
$3(x + 2) + 1 = 8$	Given
$6x + 6 + 1 = 8$	3) _?_
$6x + 7 = 8$	4) _?_
$6x = 1$	5) _?_
$x = \frac{1}{6}$	6) _?_

Extended Response

7. Write a two-column proof.

   Given: A is the midpoint of $\overline{ZP}$.

       $XY = ZA$

   Prove: $XY = AP$