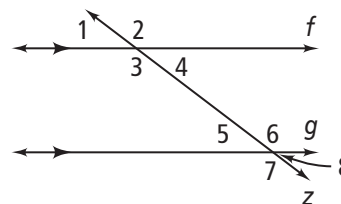Name _____ Class _____ Date _____

3-2 Standardized Test Prep
Properties of Parallel Lines

Multiple Choice

For Exercises 1–6, choose the correct letter.

For Exercises 1–4, use the figure at the right.

1. Which angle is congruent to ∠1?
   - Ⓐ ∠2
   - Ⓒ ∠6
   - Ⓑ ∠5
   - Ⓓ ∠7

2. Which angle is not supplementary to ∠6?
   - Ⓕ ∠2
   - Ⓖ ∠4
   - Ⓗ ∠5
   - Ⓘ ∠8

3. Which can be used to prove directly that ∠1 ≅ ∠8?
   - Ⓐ Alternate Interior Angles Theorem
   - Ⓑ Corresponding Angles Postulate
   - Ⓒ Same-Side Interior Angles Theorem
   - Ⓓ Alternate Exterior Angles Theorem

4. If $m\angle 5 = 42$, what is $m\angle 4$?
   - Ⓕ 42
   - Ⓖ 48
   - Ⓗ 128
   - Ⓘ 138

For Exercises 5 and 6, use the figure at the right.
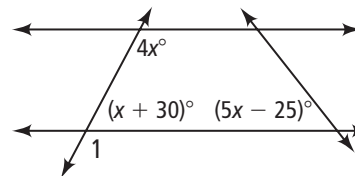
5. What is the value of x?
   - Ⓐ 10
   - Ⓒ 30
   - Ⓑ 25
   - Ⓓ 120

6. What is the measure of ∠1?
   - Ⓕ 45
   - Ⓖ 60
   - Ⓗ 120
   - Ⓘ 125

Short Response

7. Write a two-column proof of the Alternate Exterior Angles Theorem (Theorem 3-2).

   Given: $r \parallel s$

   Prove: $\angle 1 \cong \angle 8$