Quiz 4.5: Parallelism and Perpendicularity

Multiple Choice: *Choose the letter that corresponds to the correct answer. Write the answer in your answer sheet.*

1. If two angles are adjacent and complementary, then the non-common sides are:

   A. Congruent B. Intersecting C. Parallel D. Perpendicular

2. If two lines are perpendicular to each other, then they form:

   A. Two right angles B. Four right angles C. Six right angles D. Eight right angles

3. "If two lines are cut by a transversal so that corresponding angles are congruent, then the lines are parallel." This is stated in:

   A. Alternate Exterior Angles Converse Theorem
   B. Alternate Interior Angles Converse Theorem
   C. Corresponding Angles Converse Postulate
   D. Triangle Interior Angles Theorem

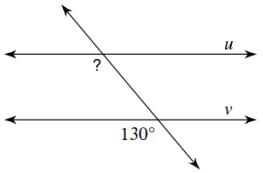
4. Which theorem states that if two lines are cut by a transversal so that consecutive exterior angles are supplementary, then the lines are parallel?

   A. Alternate Interior Angles Converse Theorem
   B. Alternate Exterior Angles Converse Theorem
   C. Consecutive Exterior Angles Converse Theorem
   D. Consecutive Interior Angles Converse Theorem

5. Which of the following reasons *CANNOT* be used to prove that two lines are parallel?

   A. Alternate Exterior Angles Converse Theorem
   B. Alternate Interior Angles Converse Theorem
   C. Corresponding Angles Converse Postulate
   D. Triangle Interior Angles Theorem

6. Find the measure of the indicated angle that makes lines u and v parallel.

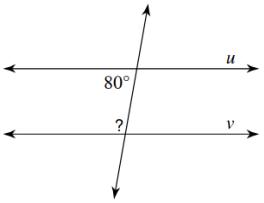


   A. $120°$ B. $130°$ C. $140°$ D. $150°$

7. If two lines are cut by a transversal so that consecutive interior angles are supplementary, then the lines are:

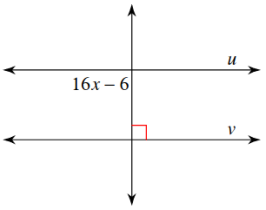
   A. Congruent B. Intersecting C. Parallel D. Perpendicular

8. Find the measure of the indicated angle that makes lines u and v parallel.



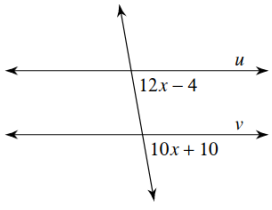
   A. $50°$ B. $60°$ C. $70°$ D. $80°$

9. Find the measure of angle x that makes lines u and v parallel.



   A. 6 B. 7 C. 8 D. 9

10. Find the measure of angle x that makes lines u and v parallel.



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Answer Key

1. If two angles are adjacent and complementary, then the non-common sides are:

   Solution:

   A. Congruent B. Intersecting C. Parallel D. Perpendicular

2. If two lines are perpendicular to each other, then they form:

   Solution:

   A. Two right angles B. Four right angles C. Six right angles D. Eight right angles

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   Solution:

   A. Alternate Exterior Angles Converse Theorem C. Corresponding Angles Converse Postulate

   B. Alternate Interior Angles Converse Theorem D. Triangle Interior Angles Theorem

4. Which theorem states that if two lines are cut by a transversal so that consecutive exterior angles are supplementary, then the lines are parallel?

   Solution:

   A. Alternate Interior Angles Converse Theorem C. Consecutive Exterior Angles Converse Theorem

   B. Alternate Exterior Angles Converse Theorem D. Consecutive Interior Angles Converse Theorem

5. Which of the following reasons *CANNOT* be used to prove that two lines are parallel?

   Solution:

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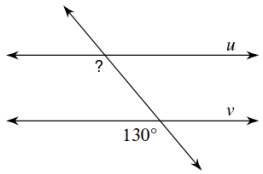

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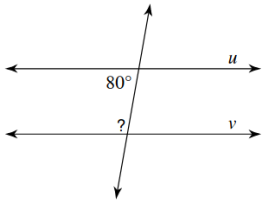

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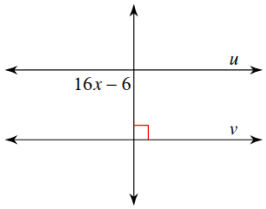

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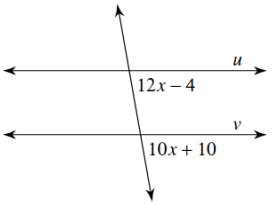

Solution:

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