# **Math 7 B Unit Test Guide**

## Angle Pairs Unit Test

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| **Item** | **Lesson Coverage** | **Objective** | **Lesson Page** | **Assessment Item** |
| 1 | Lesson 2: Adjacent Angles | Determine whether two angles in a geometric figure are adjacent. | p. 1-6 | *Use the image to answer the question.*    Are the two indicated angles adjacent? Why or why not?  Answer: No, the two indicated angles do not share a common ray. |
| 2 | Lesson 2: Adjacent Angles | Use the angle addition postulate to find the measure of an unknown angle in a simple figure. | p. 7-11 | *Use the image to answer the question.*    What is the measure of ?  Answer: 103 |
| 3 | Lesson 3: Solve Equations with Adjacent Angles | Use facts about adjacent angles in a multi-step problem to write simple equations for an unknown angle in a figure. | p. 1-6 | *Use the image to answer the question.*    What is an equation for these two adjacent angles?  Answer: |
| 4 | Lesson 3: Solve Equations with Adjacent Angles | Use facts about adjacent angles in a multi-step problem to solve simple equations for an unknown angle in a figure. | p. 7-12 | Two adjacent angles, and , form a resulting angle with measure 135°. If and , what are the two unknown angle measures?  Answer: , |
| 5 | Lesson 4: Complementary Angles | Use the relationship between complementary angles to find the measure of an unknown angle in a simple figure. | p. 6-10 | A figure displays two complementary nonadjacent angles. If one of the angles has a measure of , what is the other angle measure?  Answer: 51° |
| 6 | Lesson 5: Solve Equations with Complementary Angles | Use facts about complementary angles in a multi-step problem to write simple equations for an unknown angle in a figure. | p. 1-5 | A figure shows two nonadjacent angles with measures and . If the angles are complementary, what is the equation for the angle measures?  Answer: |
| 7 | Lesson 5: Solve Equations with Complementary Angles | Use facts about complementary angles in a multi-step problem to solve simple equations for an unknown angle in a figure. | p. 6-10 | Two complementary angles have measures and . What is the value of and the two angle measures?  Answer: , , and |
| 8 | Lesson 6: Supplementary Angles | Use the relationship between supplementary angles to find the measure of an unknown angle in a simple figure. | p. 7-11 | Angles and are supplementary angles. What is if ?  Answer: |
| 9 | Lesson 7: Solve Equations with Supplementary Angles | Use facts about supplementary angles in a multi-step problem to write simple equations for an unknown angle in a figure. | p. 1-5 | Two supplementary angles have measures and . What is the equation to solve for *x*?  Answer: 105; 180 |
| 10 | Lesson 7: Solve Equations with Supplementary Angles | Use facts about supplementary angles in a multi-step problem to solve simple equations for an unknown angle in a figure. | p. 6-10 | Two angles are supplementary with measures and . What is the measure of ?  Answer: 52 |
| 11 | Lesson 8: Vertical Angles | Determine whether two angles in a geometric figure are vertical angles. | p. 1-6 | *Use the image to answer the question.*    Which angle is a vertical angle with ?  Answer: 8 |
| 12 | Lesson 8: Vertical Angles | Use the relationship between vertical angles to find the measure of an unknown angle in a simple figure. | p. 7-11 | *Use the image to answer the question.*    If , what is ?  Answer: 43 |
| 13 | Lesson 9: Solve Equations with Vertical Angles | Use facts about vertical angles in a multi-step problem to write simple equations for an unknown angle in a figure. | p. 1-5 | *Use the image to answer the question.*    and . What equation will solve for x?  \_\_\_\_*x°* +\_\_\_\_\_° = \_\_\_\_\_°  Answer: 2; 8; 112 |
| 14 | Lesson 9: Solve Equations with Vertical Angles | Use facts about vertical angles in a multi-step problem to solve simple equations for an unknown angle in a figure. | p. 6-11 | For two vertical angles with measures and , what is the measure of each angle?  Answer: 14 |
| 15 | Lesson 10: Find Missing Angles | Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write simple equations for an unknown angle in a figure. | p. 1-5 | In a diagram, and are vertical angles, and is a complementary angle with . If , write an equation that you can use to solve for .  Answer: |