Geometry In Construction Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 5 Test Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Period\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Identify quadrilaterals by their properties |

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| * Name each figure shown.
* Be as specific as you can, but do not be fooled by how the figure looks. Draw you conclusions on what you know.
 |
| 1. Name | 2.Name | 3.Name | 4.Name |
|  |
| * Name each figure shown.
* Be as specific as you can, but do not be fooled by how the figure looks. Draw you conclusions on what you know.
* Write down the property(ies) you used to determine your answer
 |
| Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Property(ies)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Property(ies)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. The following work has been done. Classify the following Quadrilateral ABCD.

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| **Sides** | **slopes** | **lengths** |
| AB |  |  |
| BC |  |  |
| CD |  |  |
| DA |  |  |

ABCD is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ---------------------------------------------------------------------------------------------------------------------------------- |
| 1. Is the quadrilateral below a rectangle or a square? AB = 3x + 4, AC = 18 + 4x, CD = 16 + 2x. Show your work, Explain your answer.

AB = \_\_\_\_\_\_\_, AC = \_\_\_\_\_\_\_, CD = \_\_\_\_\_\_\_BACD is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, because\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
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| Use properties of a known quadrilateral to solve problems  |
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| 1. Fill inthe blanks for the missing sides. ABCD is a rectangle. AB = 24, BC = 7, EC = 12.5
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|  | AD = \_\_\_\_\_\_DC = \_\_\_\_\_\_AE = \_\_\_\_\_\_\_ | AC = \_\_\_\_\_\_\_DB = \_\_\_\_\_\_\_ |

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| 12. Fill in the blanks for the missing angles. ABCD is a Rhombus. |
|  | m∠1 = \_\_\_\_\_\_\_m∠2 = \_\_\_\_\_\_\_m∠3 = \_\_\_\_\_\_\_m∠4 = \_\_\_\_\_\_\_ | m∠5 = \_\_\_\_\_\_\_m∠10 = \_\_\_\_\_\_\_m∠DAB = \_\_\_\_\_\_\_m∠ADC = \_\_\_\_\_\_\_ |
|  |
| 13. ABCD is a square. Find the followign measures. (Hint: Fill in all the ANGLE and SEGMENT measure on the picture.) |
|  | BE = \_\_\_\_\_\_\_CE = \_\_\_\_\_\_\_AB = \_\_\_\_\_\_\_DA = \_\_\_\_\_\_\_BD = \_\_\_\_\_\_\_ | m∠BAE = \_\_\_\_\_\_m∠BCE = \_\_\_\_\_\_ m∠DEC = \_\_\_\_\_\_ m∠AED = \_\_\_\_\_\_ m∠ADC = \_\_\_\_\_\_ |
| 14. ABCD is a kite Fill in all the ANGLE and  SEGMENT measure on the picture. | BC = \_\_\_\_\_\_AE= \_\_\_\_\_\_CE = \_\_\_\_\_\_CD = \_\_\_\_\_\_AD = \_\_\_\_\_\_ | m∠CED = \_\_\_\_\_\_m∠ABE = \_\_\_\_\_\_m∠ECD = \_\_\_\_\_\_m∠EDA = \_\_\_\_\_\_ m∠BCE = \_\_\_\_\_m∠BCD = \_\_\_\_\_\_ |
| 15. In isosceles trapezoid *ABCD*, *m∠A* = 5x – 15 and *m∠C* = 2x + 20. Find the measures of all of the angles.*m∠A = \_\_\_\_\_\_\_\_\_, m∠B = \_\_\_\_\_\_\_\_\_, m∠C = \_\_\_\_\_\_\_\_\_, m∠D = \_\_\_\_\_\_\_\_\_.*What property did you use?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| 15. | **ABCD is a Kite.** a.) Find the lengths of both diagonals.b.) Find the perimeter of ABCD.c.) Fill in the measures of the missing angles in the figure.  |