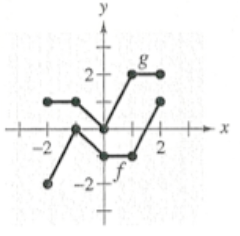
**Algebra 2 HW #7 FACTORING & OTHER ALG 1 TOPICS WS Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_**

**1.** Given the graph of f and g, state the following:

**a)** Is the graph f a function? Explain. **c)** Is the graph g a function? Explain.

**b)** Domain and range for graph f. **d)** Domain and range for graph g.

Domain Range Domain Range

Interval Interval

Inequality Inequality

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**2.** Factor each polynomial.

**a)** x2 - 8x - 20 **b)** 2x2 + 16x + 32 **c)** 4x2 – 11x + 7

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**3.** Solve each equation by factoring.

**a)** x2 + 5x - 36 = 0 **b)** 2x2 + 8x – 24 = 0 **c)** 3x2 – 16x + 5 = 0

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**4.** Solve the system of equations using a method of your choice.

**a)** y = 6x - 11 **b)** -4x – 2y = -12 **c)** x – 2y = 15  
 -2x – 3y = -7 4x + 8y = -24 2x + 3y = 2