Ch 8 Test **REVIEW** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1.

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| **Write an expression equivalent to** $\left(2x^{2}+3x+6\right)+\left(7x^{2}-2x\right)-(-10x-3)$ **using the fewest number of possible terms. (3 Pts)** |

2.

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| **Select *all* the expressions that are equivalent to** $\left(x-6\right)^{2}$**. (2 pts)**1. $x^{2}-36$
2. $(x-6)(x+6)$
3. $x^{2}-12x+36$
4. $x^{2}+12x+36$
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3.

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| **Choose a number that will make the following equation true. (1 Pt)**$\left(x+4\right)^{2}-5=x^{2}+8x+$**☐**1. **-4**
2. **-11**
3. **11**
4. **9**
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4.

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| **Simplify the following expressions. Write the answer in standard polynomial form. (3 Pts Each)**$4x^{2}(2x-6x^{2}+5)$$(3x-4)(x+5)$$(4x^{2}+2)(3x-5)$ |

5.

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| **Factor the following expressions completely. (2 Pts Each)**$x^{2}+2x-8$$x^{2}-14x+24$$2x^{3}+8x^{2}+8x$$x^{2}-2x-35$$6x^{2}+5x-6$$x^{2}-64$$16x^{2}+60x-100$$6x^{2}-36x$ |

6.

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| **Write an expression in standard polynomial form that represents the white area in the square below. (3 Pts)**  (x+2) (2x+4) |

7.

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| **The top of a rectangular table has an area of** $6x^{2}+7x-49$**. What are the dimensions of the table? Find an expression for both the length and the width?. (2 Pts)** |

8.

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| **What is an expression for the area of the figure? Write your answer as a polynomial in standard form. (5 Pts)**x+33x2x-45x |

9.

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| **Error Analysis: Describe and correct the error made in simplifying the product. (2 Pts)**$(x-y)^{2}=x^{2}-y^{2}$ |