Name:

Date:

School:

Facilitator:

**3.03 Multiplying Monomials by Polynomials**

**Multiply each of the following to simplify the expression.**

|  |  |  |
| --- | --- | --- |
| 1. | 2*x*(5*x* + 6) | Answer:  |
|  | **Show work here:** |  |
|  |  |  |
|  |  |  |
| 2. | 5*x*(*x*2 – *x* – 7) | Answer:  |
|  | **Show work here:** |  |
|  |  |  |
|  |  |  |
| 3. | -9*n*(4*n*2 – 5*n* + 3) | Answer:  |
|  | **Show work here:** |  |
|  |  |  |
|  |  |  |
| 4. | 5*x*2(-2*x*2 + 5*x* – 2) | Answer:  |
|  | **Show work here:** |  |
|  |  |  |
|  |  |  |
| 5. | -4*x*(2*x*2 + 3*x* – 10) | Answer:  |
|  | **Show work here:** |  |
|  |  |  |
|  |  |  |
| 6. | 3*x*(4*x*2 + 2*x* – 5) | Answer:  |
|  | **Show work here:** |  |
|  |  |  |
|  |  |  |
| 7. | 3*m*5(2*m*2 + 4*m*3) | Answer:  |
|  | **Show work here:** |  |
|  |  |  |
|  |  |  |
| 8. | -12*a*6(8*a*3 – 2*a*2 + 5*a*) | Answer:  |
|  | **Show work here:** |  |
|  |  |  |
|  |  |  |

**Solve the following application problems. Show all work and write your final answers in the space provided.**

|  |  |
| --- | --- |
| 9. | The area of a rectangle is found by the formula *A* = *lw* where *l* represents the length and *w* represents the width. Calculate the area of the rectangle below. |
|  |  |
|  | **Show work here:** |
|  |  |
|  |  |
|  | The area of the rectangle is *A* = . |
|  |  |
|  |  |
| 10. | The area of a rectangle is found by the formula *A* = *lw* where *l* represents the length and *w* represents the width. Calculate the area of the rectangle below. |
|  |  |
|  | **Show work here:** |
|  |  |
|  |  |
|  | The area of the rectangle is *A* = . |
|  |  |
|  |  |
|  |  |