**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Row Game** – Multiplying Polynomials

**Vocabulary:**

 *Monomial –* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *Polynomial –* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *One partner completes the exercises in column A. The other completes those in column B. When you add your answers, you should get the value in the middle column. If not, see if you can find your error.*

|  |  |  |  |
| --- | --- | --- | --- |
|  | ***Column A*** | ***Sum*** | ***Column B*** |
| **1** | $$x(x^{2}-2x+3)$$ | $$-7x^{3}+4x^{2}-7x$$ | $$-2x(4x^{2}-3x+5)$$ |
| **2** | $$-z(3-2z)$$ | $$3z^{2}-z$$ | $$-z(-2-z)$$ |
| **3** | $$6r^{2}\left(2r-1\right)-3r(4r^{2}-5r)$$ | $$5r^{3}+9r^{2}$$ | $$4r\left(2r^{2}-3r\right)-3r^{2}(r-4)$$ |
| **4** | $$5x^{2}y(3x^{2}-4xy+y^{2})$$ | $$18x^{4}y-26x^{3}y^{2}+3x^{2}y^{2}$$ | $$3x^{2}y(x^{2}-2xy+y^{2})$$ |
| **5** | $$\left(2t+3\right)(4t+1)$$ | $$10t^{2}+7t-12$$ | $$\left(t-5\right)(2t+3)$$ |
| **6** | $$\left(a-4\right)^{2}$$ | $$2a^{2}+32$$ | $$\left(a+4\right)^{2}$$ |
| **7** | $$\left(d+2\right)(d^{2}+3d+5)$$ | $$2d^{3}-3d^{2}+33d-25$$ | $$\left(d-5\right)\left(d^{2}-3d+7\right)$$ |
| **8** | $$\left(2z-3\right)^{2}$$ | $$8z^{2}+18$$ | $$\left(2z+3\right)^{2}$$ |
| **9** | $$\left(b+1\right)\left(b-2\right)(b+3)$$ | $$2b^{3}-10b$$ | $$\left(b-1\right)\left(b+2\right)(b-3)$$ |

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