**Chapter 5 Practice Test: Polynomials**

 **Student Self-Assessment**

 Please fill in the following after completing the practice test and looking at the correct solutions.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Learning Outcomes** | **Practice Questions** | **I get all of it** | **I get it, but made some errors** | **I get only some of it** | **I don’t get it at all** |
| B5 | Demonstrate an understanding of polynomials (limited to polynomials of degree less than or equal to 2). | #1 – 4 |  |  |  |  |
| B6 | Model, record and explain the operations of addition and subtraction of polynomial expressions, concretely, pictorially, and symbolically. | #5 – 8  |  |  |  |  |
| B7 | Model, record, and explain the operations of multiplication and division of polynomial expressions by monomials, concretely, pictorially and symbolically. | # 9 – 12 |  |  |  |  |

What do you need to work on? What is your plan to ensure you will be successful come test day?

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1. Model the following polynomial expressions using **algebra tiles**.
2. b)
3. Write the **polynomial** for the given model.



a) b)

1. Complete the following table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Polynomial | Coefficient(s) | Constant | Variable(s) | Degree | Number of Terms | Type of Polynomial |
| 4 – 11*w* |  |  |  |  |  |  |
| –2 + *y*2 + 5*xy* |  |  |  |  |  |  |

1. Identify the **equivalent polynomials** from the list below. Please show all work to justify your answer.
2. Add or subtract the following polynomials.
3. Determine the **perimeter**. Show your work clearly.



1. a) What polynomial must be **added to** to get ?
2. What polynomial must be **added to** to get a sum of **zero**?
3. What polynomial must be **subtracted from** to get ? Show your work and/or reasoning.
4. Determine each product.
5. b) c)
6. Determine each quotient.

a) b) c)

1. Write a simplified polynomial for the **area** of this shape. Show your work.



1. a) Find the simplified polynomial that represents the **area of the shaded region**. Show

 your work.

4*x* – 1

3*x*

3*x*

2*x* + 1

1. Find the shaded area if cm.

**Answers to Chapter 5 Practice Test**



1. a) b)
2. a) b)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Polynomial | Coefficient(s) | Constant | Variable(s) | Degree | Number of Terms | Type of Polynomial |
| 4 – 11*w* | –11 | 4 | *w* | 1 | 2 | binomial |
| –2 + *y*2 + 5*xy* | 1 and 5 | –2 | *x* and *y* | 2 | 3 | trinomial |

1. I and III, II and VI, IV and V
2. a) b) c)
3. a) b)
4. a) b) c)
5. a) b) c)
6.
7. a) b) 36 cm2