

LESSON **7-5** **Challenge** **Pick the Polynomial**

Match each polynomial with the correct clue. Each polynomial can be used only once. Not every polynomial will be used.

Use these polynomials for 1 – 7.

$x^5 + x^3 + x$	$2x^4y^4 + 3x^2y^5$
$2x^4$	$x^5y - 3x^2y + xy$
$3x + 3y + 3z$	$-3xy^4$
$2xy + 5xy$	$2x^2y + 5xy^2$
$4x^2 - 3x^5 + x$	$4xyz^2 + xyz$

1. I am a monomial with degree 5.
Who am I?

2. I am a sum of monomials with degree 8. Who am I?

3. I am a trinomial with degree 5.
Who am I?

4. I am a binomial. Both of my terms have degree 2. Who am I?

5. I am a monomial with degree 4.
Who am I?

6. I am a binomial with degree 4.
Who am I?

7. I am a trinomial. When you put me in standard form, my leading coefficient is -3 . Who am I?

Use these polynomials for 8 – 14.

$4xy + 3x^2y$	$x^3 + x^2 + x$
$x^2 + x - 3$	$x^4 + x^3 + x^2$
$-3 + x + 4x^2$	$2x^2 - 3x^3 + 1$
$x^3y - 3xyz + z$	$x - 3$
$-x + 3$	$x^2 + y^2 + z^2 + w^2$

8. I am a linear expression. My constant is -3 . Who am I?

9. I am a quartic trinomial. I have three different variables. Who am I?

10. I am a cubic binomial. Who am I?

11. I am a quadratic polynomial. I have no constants. Who am I?

12. I am a cubic trinomial with one variable. Who am I?

13. I am a quadratic trinomial. When you put me in standard form, my leading coefficient is 4. Who am I?

14. I am a quartic trinomial. Who am I?
