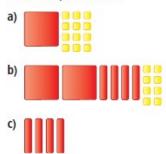
In each polynomial, identify: the variable, number of terms, coefficients, constant term, and degree. Chapter 5: Mid Unit Review

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a) $3m-5$	Variable	# of Terms	Coefficients	Constant	Degree
b) 4r					
c) $x^2 + 4x + 1$					

- Create a polynomial that meets these conditions: trinomial in variable *m*, degree 2, constant term is −5
- 3. Which polynomial is represented by each set of algebra tiles? Is the polynomial a monomial, binomial, or trinomial? How do you know?



Use algebra tiles to represent each polynomial. Sketch the tiles you used.

a)
$$4n - 2$$

b)
$$-t^2 + 4t$$

c)
$$2d^2 + 3d + 2$$

5. For each pair of monomials, which are like terms? Explain how you know.

a)
$$2x, -5x$$

e)
$$8x^2$$
, $3x$

d)
$$2q^2$$
, $-7q^2$

f)
$$-5x$$
, $-5x^2$

6. Simplify $3x^2 - 7 + 3 - 5x^2 - 3x + 5$.

- 7. Renata simplified a polynomial and got $4x^2 + 2x 7$. Her friend simplified the same polynomial and got $-7 + 4x^2 + 2x$. Renata thinks her friend's answer is wrong. Do you agree? Explain.
- **8.** Cooper thinks that 5x 2 simplifies to 3x. Is he correct? Explain.

9. Identify the equivalent polynomials.

Identify the equivalent polynomials.	•	1
Justify your answers.	Simplified	proper order
a) $1 + 3x - x^2$		
b) $1 + 3x^2 - x^2 + 2x - 2x^2 + x - 2$		
c) $x^2 - 3x - 1$		
d) $6 + 6x - 6x^2 - 4x - 5 + 2x^2 + x^2 - 4$		
e) $3x - 1$		
f) $-3x^2 + 2x - 3$		
g) $6x^2 - 6x - 6 + x - 5x^2 - 1 + 2x + 4$		
h) $3x - x^2 + 1$		
		!

10. Simplify

a)
$$(4f^2 - 4f) + (-2f^2)$$

b)
$$(3r^2 + 2r + 5) + (-7r^2 + r - 3)$$

c)
$$(-2\nu + 5) - (-9\nu + 3)$$

d)
$$(-2g^2-12)-(-6g^2+4g-1)$$

11. Add or subtract. Use a strategy of your choice.
a)
$$(3w^2 + 17w) + (12w^2 - 3w)$$

b)
$$(5m^2-3)+(m^2+3)$$

c)
$$(-3h - 12) - (-9h - 6)$$

d)
$$(6a^2 + 2a - 2) + (-7a^2 + 4a + 11)$$

e)
$$(3y^2 + 9y + 7) - (2y^2 - 4y + 13)$$

f)
$$(-14 + 3p^2 + 2p) - (-5p + 10 - 7p^2)$$

- **12. a)** Which polynomial must be added to $5x^2 + 3x 2$ to get $7x^2 + 5x + 1$?
- b) Which polynomial must be subtracted from $5x^2 + 3x 2$ to get $7x^2 + 5x + 1$? Justify your answers.