U1T Review **Name** _____

1. Convert: *Use your green sheet!*
43 miles to feet

2. Convert: *Use your green sheet!*
620 inches to cm

3. Convert: *Use your green sheet!*
30 ft/sec to miles/hour

4. Convert: *Use your green sheet!*
How many seconds are there in a week?

5. Write as an algebraic expression:
Quentin has *x* markers. Kellen, Garrett, and Ben then gave Quentin an additional *y* markers **each**. Write an expression to represent the number of markers Quentin has now.

6. Write as an algebraic expression:
Three times the difference of the cube of x and the square of y

7. Write as an algebraic expression:
Add 5 to the product of 8 and x, then divide by 2

8. Identify the terms, coefficients, and constant $36x^3 + 27x^2 - 18x - 9$

Terms:	Coefficients:	Constant:

9. Suppose $5(3 - y) = 7x$. When $y = 10$, what is the value of x?

10. A rectangle has a length of 10 m and a width of 200 cm. What is the **perimeter** of the rectangle?
$P = 2L + 2W$

11. Simplify the expression, then determine <u>how many terms</u> are in the <u>simplified</u> expression.

$$2(3 + x) + x(1 - 4x) + 5$$

12. Add the following polynomial.

$(5x^2 - 8x - 6) + (7x^2 - 9x - 3)$

13. Subtract the following polynomial.

$(3x^2 + 5x - 9) - (6x^2 + 5x - 11)$

14. Multiply the following binomials.

$(x - 6)(x + 7)$

15. Multiply the following binomials.

$(x - 4)^2$

16. Classify the following polynomial by number of terms and by degree:

$4x^3 + 3x^2 + 2x$

Name by terms:

Name by degree:

17. Sophia has 8 books in her locker. All the books are either personal books or school books. She has three times as many school books as personal books. How many schools books does Sophia have in her locker?

18. Simplify $\sqrt{112}$

19. Simplify $\sqrt{175}$

20. Simplify $-4\sqrt{3} - 3\sqrt{3}$

21. Simplify $3\sqrt{6} + 2\sqrt{54}$

22. Simplify $3\sqrt{2} \cdot \sqrt{2}$

23. Simplify $5\sqrt{10}(3 + \sqrt{5})$

24. Label the following as rational or irrational:

_____ 30/6 _____ π _____ 8.14

25. Which measurement is more precise(exact)?

84 g or **2.51 mg**