Math 7: Equations Day 1 – Variables and Expressions

Directions: Write an algebraic expression for each word phrase

1. 10 less than *x*

2. 5 more than *d*

3. 7 minus *f*

4. the sum of 11 and *k*

5. *x* multiplied by 6

6. a number *t* divided by 3

7. one fourth of a number *n*

8. the product of 2.5 and a number *t*

9. the quotient of 15 and *y*

10. a number *q* tripled

11. 3 plus the product of 2 and *h*

12. 3 less than the quotient of 20 and *x*

13. The local video store charges a monthly membership fee of $5 and $2.25 per video. Write a variable expression to represent the situation.

Videos (v)	Cost (c)
1	$7.25
2	$9.50
3	$11.75

14. Dorothy gets paid to walk her neighbor's dog. For every week that she walks the dog, she earns $10. Write a variable expression to represent the situation.

Weeks (w)	Pay (p)
4	$40.00
5	$50.00
6	$60.00

Write an algebraic expression for each word phrase.

15. 8 minus the quotient of 15 and *y*

16. a number *q* tripled plus *z* doubled

17. the product of 8 and *z* plus the product of 6.5 and *y*

18. the quotient of 5 plus *d* and 12 minus *w*

19. **Error Analysis:** A student writes $5y \cdot 3$ to model the word phrase *the sum of 5y and 3*. Explain the error.