3.1 & 3.2 Review Sheet

Complete in your spiral. Remember: Copy the Problem. Show all work!

Identify the terms, coefficients, and constants in the expression.

1. $3 + c + e$ terms: 3, c, e   constants: 3
      coefficients: 1, 1
2. $5m + 9$ terms: 5m, 9   constants: 9   coefficients: 5
3. $3p^2 + 7$

   terms: $3p^2$, 7   constants: 7   coefficients: 3

Evaluate the expression when $c = 4$, $d = 6$, and $e = 10$

4. $7d$ ④ $7d$ ⑤ $\frac{24}{c} - d$ ⑥ $4c + 3\frac{d}{4}$ ⑦ $\frac{3e}{c+1}$
5. $\frac{24}{c} - d$ $7(6)$ $\frac{24}{4} - 6$ $4(4) + 3(6)$
6. $4c + 3m$ $\boxed{42}$ $6 - 6$ $16 + 18$ $\frac{3(10)}{4+1} = \frac{30}{5} = \boxed{6}$
7. $\frac{3e}{c+1}$ $\boxed{0}$ $\boxed{34}$

Evaluate the expression when $x = 12$, $y = 5$, and $z = 2$

8. $\frac{x}{6} + 7z$ ⑧ $\frac{x}{6} + 7z$ ⑨ $\frac{xy}{6} - 3z$ $\frac{60}{6} - 6$
9. $\frac{xy}{6} - 3z$ $\frac{12}{6} + 7(2)$ $\frac{12(5)}{6} - 3(2)$ $10 - 6$
      $2 + 14$ $\boxed{16}$ $\boxed{4}$

10. A summer job pays $15 per hour.
    a. Write an expression for the amount of money you will earn working h hours. $15h$
    b. You work 12 hours. How much money do you make? $15(12)$ $\boxed{\$180}$
    c. After working 22 hours, do you have enough money to buy a new video game system for $350?
       $15h \Rightarrow 15(22) \Rightarrow$ $\begin{array}{r}22\\ \times 15\\ \hline 110\\ 22\\ \hline 330\end{array}$ $\$330$ $\boxed{\text{no because need \$350}}$

Write the phrase as an expression.

11. *The quotient of a number and 4* $\boxed{\frac{n}{4}}$
12. *7 fewer than k* $k - 7$
13. *The difference of a 11 and d* $11 - d$

Write two phrases for the expression

14. $x + 8$ $\genfrac{}{}{0pt}{}{x\ increased\ by\ 8}{8\ more\ than\ x}$
15. $20 - n$ ⟶ $\genfrac{}{}{0pt}{}{20\ decreased\ by\ a\ number}{n\ less\ than\ 20}$

Write the phrase as an expression.

16. *Twelve more than the product of 5 and a number* $12 + 5n$
17. *The quotient of a number and 3 increased by 7* $(x \div 3) + 7$
18. *15 decreased by the product of a number and 4* $15 - 4n$

19. Your uncle is two years older than 3 times your age.
    a. You are x years old. Write an expression to describe your uncle's age. $3x + 2$
    b. You are 12 years old. How old is your uncle? $3(12) + 2$
         $36 + 2$ $\boxed{38\ years\ old}$

20. Your friend has read 6 more than twice as many pages as your sister has read.
    a. Let x be the number the pages your sister has read. Write an expression for the number of pages your friend has read. $6 + 2x$
    b. Your sister read 32 pages. How many pages did your friend read?

         $6 + 2(32)$
         $6 + 64$ $\boxed{70\ pages}$ Math 6