$\qquad$ Date: $\qquad$
$\qquad$

## 5.1-5.4 Quiz Review CYU

$\square$ Use when you get it right all by yourself
S Use when you did it all by yourself, but made a silly mistake
HUse when you could do it alone with a little help from teacher or peer
$\boldsymbol{G}$ Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
$N$ Use when a question was not even attempted

| CONCEPTS | BASIC | INTERMEDIATE | ADVANCED |
| :--- | :---: | :---: | :---: |
| Product Rule | 1,2 |  |  |
| Power Rule | $11,12,15$ |  |  |
| Power of a Product Rule | 16 | 20 |  |
| Power of a Quotient Rule | 9 | 10 |  |
| Quotient Rule |  |  |  |
| Zero Exponent | 5,6 | 13,14 | $22,30,31$ |
| FOILing Method to Multiply | 28 |  | $26,27,32$ |
| Distribution Method to Multiply | Any Trinomial | Multiplied to | Any trinomial |
| Punnett Square Method to Multiply | $23-25,28,29$ | 18 | $19,22,26,27,30,31$, |
| Degree of an Expression | $7,8,23-25,29$ | 17,18 | $19,21,26,27$ |
| Adding \& Subtracting Polynomial Terms | $23,25,28,29$ | 18 | $19,22,26,27,30,31$ |
| Standard Form | 2 |  |  |

Perform the indicated operations and simplify. Show all work to earn full credit. Box your final answer.

1. $\left(5 x^{2}\right)\left(7 x^{3}\right)$
2. $\left(4 y^{2}\right)\left(8 y^{7}\right)$
3. $-4^{2}$
4. $(-4)^{2}$
5. $(x-5)(2 x+1)$
6. $(3 x-2)(x+5)$
7. $(x-5)+(2 x+1)$
8. $(3 x-2)+(x+5)$
9. $\frac{7 x^{9} y^{12}}{x^{3} y^{10}}$
10. $\frac{20 a^{2} b^{8}}{14 a^{2} b^{2}}$
11. $\left(12 m^{7} n^{6}\right)^{2}$
12. $\left(4 y^{9} z^{10}\right)^{3}$
13. $3(4 y-3)(4 y+3)$
14. $2(7 x-1)(7 x+1)$
15. $\left(x^{7} y^{5}\right)^{9}$

Perform the indicated operations and simplify. Write your answer in standard form. State the degree. Classify the expression based on the number of terms. Show all work to earn full credit. Box your final answer.
18. $\left(10 x^{2}+7 x-9\right)-\left(4 x^{2}-6 x+2\right)$
19. $0.7 y^{2}-1.2+1.8 y^{2}-6 y+1$
20. $\left(5 x^{3}\right)^{3}$
21. $7.8 x^{2}-6.8 x+3.3+0.6 x^{2}-9$
22. $(x+4 y)^{2}$
23. $(y-9 z)+(y-9 z)$
24. $(x+4 y)+(x+4 y)$
25. $(y-9 z)+(y+9 z)$
26. $7 x^{2}-6 x y+4\left(y^{2}-x y\right)$
27. $5 a^{2}-3 a b+6\left(b^{2}-a^{2}\right)$
28. $(x-3)\left(x^{2}+5 x-1\right)$
29. $(x+1)\left(x^{2}-3 x-2\right)$
30. $\left(2 x^{3}-7\right)\left(3 x^{2}+10\right)$
31. $\left(5 x^{3}-1\right)\left(4 x^{4}+5\right)$
32. $(2 x-7)\left(x^{2}-6 x+1\right)$

CYU Reflection: How far can you go: basic, intermediate, or advanced?
Rate your mastery level!
How confident are you with the skills this CYU covered? Circle the score you would give yours elf.


