Name __Key__   Date _____ Pd __

CYU 1.4 Exponent & Order of Operations DAY ONE

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Evaluating exponent notation	1 - 5	6 - 7	8 - 9
Order of Operations: PEMDAS	10 - 12	13 – 14, 17	15 – 16, 18 - 21

1. Evaluate 3^5.

$3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 = \boxed{243}$

2. Evaluate 3^3.

$3 \cdot 3 \cdot 3 = \boxed{27}$

3. Evaluate 1^5.

$1 \cdot 1 \cdot 1 \cdot 1 \cdot 1 = \boxed{1}$

4. Evaluate 5^1. $\boxed{5}$

5. Evaluate 7^2.

$7 \cdot 7 = \boxed{49}$

6. Evaluate $\left(\frac{2}{3}\right)^4$.

$\left(\frac{2}{3}\right)\left(\frac{2}{3}\right)\left(\frac{2}{3}\right)\left(\frac{2}{3}\right) = \boxed{\frac{16}{81}}$
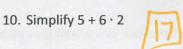
7. Evaluate $\left(\frac{1}{5}\right)^3$.

$\left(\frac{1}{5}\right)\left(\frac{1}{5}\right)\left(\frac{1}{5}\right) = \boxed{\frac{1}{125}}$
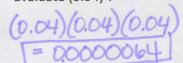
8. Evaluate $(1.2)^2$.

$(1.2)(1.2) = \boxed{1.44}$

9. Evaluate $(0.04)^3$.

$(0.04)(0.04)(0.04)$
$= \boxed{0.000064}$

10. Simplify $5 + 6 \cdot 2$ $\boxed{17}$

11. Simplify $4 \cdot 8 - 6 \cdot 2$ $\boxed{20}$

12. Simplify $2(8 - 3)$ $\boxed{10}$

13. Simplify $2 + (5 - 2) + 4^2$ $\boxed{21}$

14. Simplify $5 \cdot 3^2$ $\boxed{45}$

15. Simplify $\frac{1}{4} \cdot \frac{2}{3} - \frac{1}{6}$ $\boxed{0}$

16. Simplify $2[5 + 2(8 − 3)]$ $\boxed{30}$

17. Simplify $\dfrac{19 − 3 \cdot 5}{6 − 4}$ $\boxed{2}$

18. Simplify $\dfrac{|6 − 2| + 3}{8 + 2 \cdot 5}$ $\boxed{\dfrac{7}{18}}$

19. Simplify $\dfrac{3 + 3(5 + 3)}{3^2 + 1}$ $\boxed{\dfrac{27}{10}}$

20. Simplify $2 + 3\,[10\,(4 \cdot 5 − 16) − 30]$ $\boxed{32}$

21. Simplify $\left(\dfrac{2}{3}\right)^3 + \dfrac{1}{9} + \dfrac{1}{3} \cdot \dfrac{4}{3}$ $\boxed{\dfrac{23}{27}}$

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 yourself.

1	2	3	4	5	6	7	8
Basic		Intermediate			Advanced		Solved ALL!