

Lesson 4.1 Video HW

Watch and record all developed examples from the following 2 videos:

(1) <http://www.youtube.com/watch?v=O6cgOec7z58> (integral (+,-) exponents)

(2) <http://www.youtube.com/watch?v=KrNj8fM2hYc> (+ve & -ve exponents)

Then complete the following worksheet, without using a calculator

**Exponents** - Evaluate to a single number – NO CALCULATOR.

1. $6^3 = 6 \cdot 6 \cdot 6 = 216$	2. $5^0 = 1$	3. $5^2 = 5 \cdot 5 = 25$
4. $2^3 = 2 \cdot 2 \cdot 2 = 8$	5. $4^0 = 1$	6. $3^2 = 3 \cdot 3 = 9$
7. $9^{-2} = \frac{1}{9^2} = \frac{1}{9 \cdot 9} = \frac{1}{81}$	8. $(-9)^0 = 1$	9. $12^{-4} = \frac{1}{12^4} = \frac{1}{20736}$
10. $12^3 = 12 \cdot 12 \cdot 12 = 1728$	11. $(-10)^4 = (-10)(-10)(-10)(-10) = 10,000$	12. $(-7)^0 = 1$
13. $(-0.6)^3$	14. $0.11^{-1} = \frac{1}{.11}$	15. $0.02^{-2} = \frac{1}{.02^2} = \frac{1}{.0004}$
16. $0.2^{-3} = \frac{1}{.2^3} = \frac{1}{.008}$	17. $(-5)^{-1} = \frac{1}{(-5)}$	18. $\left[\frac{3}{4}\right]^2 = \frac{3^2}{4^2} = \frac{9}{16}$
19. $0.8^2 = .8 \cdot .8 = 0.64$	20. $\left[\frac{-8}{9}\right]^2 = \frac{(-8)^2}{9^2} = \frac{64}{81}$	21. $0.07^{-3} = \frac{1}{.07^3} = \frac{1}{.000343}$
22. $(-0.3)^{-2} = \frac{1}{(-.3)^2} = \frac{1}{.09}$	23. $\left[\frac{-3}{4}\right]^{-1} = \left(\frac{4}{-3}\right)^1$	24. $0.1^4 = .0001$
25. $\left[\frac{-1}{2}\right]^2 = \frac{1^2}{2^2} = \frac{1}{4}$	26. $\left[\frac{-1}{7}\right]^1 = -\frac{1}{7}$	27. $\left[\frac{-4}{6}\right]^3 = \frac{(-4)^3}{6^3} = \frac{-64}{216}$
28. $0.8^4 = .8 \cdot .8 \cdot .8 \cdot .8 = .4096$	29. $8^{-2} = \frac{1}{8^2} = \frac{1}{64}$	30. $(-0.04)^{-3} = \frac{1}{(-.04)^3} =$
31. $0.2^{-1} = \frac{1}{.2}$	32. $6^2 = 6 \cdot 6 = 36$	33. $\left[\frac{-2}{8}\right]^3 = \frac{(-2)^3}{(8)^3} = \frac{-8}{512}$