

Unit 3: Powers & Exponents***3.3 Order of Operations With Exponents***

Recall BEDMAS**Ex. Evaluate**

a) $3(2)^4$

b) $-3(-5)^2$

c) -4^4

d) $4^2 - 8 \div 2 + (-3)^2$

e) $-2(15 - 4^2) + 4(2 + 3)^3$

Ex. Write and evaluate an expression with powers to find the difference in area between a square with sides of length 3 *cm* and a square with sides of length 2 *cm*.

Ex. Two bacterial cultures grow at different rates:

Culture A: starts 5 bacteria and doubles every hour Culture B: starts 4 bacteria and triples every hour

Write and evaluate an expression using exponents to find the total combined population of both cultures after 10 hours.