Lesson: Orders of Operations

BEDMAS is an acronym we can use to remember the order in which mathematical operations are to be performed.

Example 1: 4 –(5 – 6) =	**BEDMAS** **B** – Brackets **E** – Exponents **D** – Division **M** – Multiplication * **A** – Addition **S** – Subtraction ** *division & multiplication in the order they appear from left to right **addition & subtraction in the order they appear from left to right
Example 2: (3 – 6) ÷ (9 – 10) + (24 – 4) ÷ (–5)	

Example 3: 12 – [18 – (–1) ^{2} + 3]	**Example 4**: 32 ÷ [16 x (–2)] + 20 – (4^2 + 3)

Let's Recap a Little About Exponents…

$$2 \times 2 \times 2 \times 2 = \mathbf{2}$$

Complete the following chart:

Power	Expanded (meaning)	Base	Exponent	Value
2^3	2 x 2 x 2			
(–3)^5				
		3		27
	0.6 x 0.6 x 0.6			
		(–9)	2	
$\left(\dfrac{2}{5}\right)^3$				
(–1)^2				
–1^2				

Practice: Order of Operations

a. $(3 - 4) + 5$	b. $(-4 + 7) - (2^2 + 2) \div (+3)$
c. $3 - 2(3^2 - 7) \times 4 \div 2$	d. $-8 \div (-2) - (-3)$
e. $2(4 - 7)^2 + 5 \times 2$	f. $\dfrac{(-6)(-3) - 7(6) + 9}{-3}$
g. $6 - 12 \div (-3) + 2$	h. $\dfrac{(-5)(2)(3) - 2}{(-8)(2)}$

Answers: a. 4, b. 1, c. -5, d. 7, e. 28, f. 5, g. 12, h. 2