ORDER OF OPERATIONS WITH POWERS

Note Title 9/13/2017

"BEDMAS"

B - BRACKETS - SOLVE ANY EXPRESSIONS WITH BRACKETS FIRST

E - EXPONENTS - SOLVE ANY POWERS SECOND

D/M - DIVIDE OR MULTIPLY IN ORDER FROM LEFT TO RIGHT 3rd

A/S – ADD OR SUBTRACT IN ORDER FROM LEFT TO RIGHT 4th

EXAMPLES:

1) $4^2 + 2^5$

$4 \cdot 4$

$2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$

EXPONENTS

$16 + 32$

ADD

48

2) $(3-5)^4$

EVEN EXPONENT WITH NEG. BASE → + ANSWER

BRACKET

$(-2)^4$

EXPONENT

16

SUBTRACT (NO BRACKETS)

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

$(2)(5) - 27$ MULTIPLY

$10 - 27$ SUBTRACT

-17

4) $\left[-4(-2)^3 - 2(10)\right]^2$ BRACKETS

$\left[-4(-8) - 2(10)\right]^2$ - EXPONENT

- MULTIPLY

SUBTRACT

$[32 - 20]^2$ — SUBTRACT

$(12)^2$ EXPONENT

144

5) $-8^2 \div [4(3^1 - 7^0)]$ SUBTRACT

BRACKETS

- BRACKET
  - EXPONENTS
  - SUBTRACT

$-8^2 \div [4(3 - 1)]$

$-8^2 \div [4(2)]$ — MULTIPLY

$-8^2 \div [8]$ EXPONENT

$-64 \div 8$

-8

DIVIDE

1. FINISH COLOUR BY # ← HAND IN
2. ORDER OF OPERATIONS W/S

(DO 10 QUESTIONS)