

Order of Operations

KEY

- When solving a problem, you need to decide which operation to perform on integers
- Some integer problems involve more than 1 operation and require that you follow the **order of operations**.

- The order of operations is as follows:

① Brackets - $[3+4]$

② Exponents - $5^2 = 5 \times 5 = 25$

③ { Division
Multiplication } as they occur from left to right

④ { Addition
Subtraction } as they occur from left to right

Eg 1) $(3) + (15) \div (5) - (4) \times (2)$

$$(3) + (3) - (4) \times (2)$$

$$(3) + (3) - (8)$$

$$(6) - (8)$$

$$-2$$

Eg 2) $(48) \div (-6) + (3)^2 - (4)$

$$(48) \div (-6) + (9) - (4)$$

$$(-8) + (9) - (4)$$

$$(1) - (4)$$

$$-3$$

eg 3) $6 + (-5)(+5) \div [8(3) + 1]$

$$6 + (-5)(+5) \div [24 + 1]$$

$$6 + (-5)(+5) \div (25)$$

$$6 + (-25) \div (25)$$

$$6 + (-1)$$

$$5$$