

## 1. Use a Calculator Efficiently

### Key Points:

- Know where the basic function keys are (e.g., +, −, ×, ÷, √, %, x<sup>2</sup>, 1/x, brackets).
- Use brackets to ensure the correct order of operations (BIDMAS/BODMAS).
- Understand how to recall previous answers using the ANS key.
- Learn how to navigate between different modes (e.g., normal, statistical, scientific).

### Example 1: Calculate

$$\frac{8 + 6}{2 \times (4 - 2)}$$

### Correct Steps:

- Use brackets:

$$(8 + 6) \div (2 \times (4 - 2))$$

$$= 14 \div 4$$

$$= 3.5$$

**Tip:** Always use brackets when typing grouped expressions.

## 2. Enter Values Appropriately on a Calculator

### Key Points:

- Be careful with negative numbers (use the negative sign button  $(-)$ , not the subtraction  $-$ ).
- For powers or square roots, use the  $^{\wedge}$ ,  $x^2$ , or  $\sqrt{\phantom{x}}$  buttons.
- Enter fractions using the fraction button  $a \text{ b/c}$  or use the division symbol for improper fractions

### Example 2: Calculate

$$-3^2$$

and

$$(-3)^2$$

**Incorrect input:**  $-3^2$  gives  $-9$  (calculator does  $-(3^2)$ )

**Correct input:**  $(-3)^2$  gives  $9$  (calculator squares the negative number)

### Example 3: Evaluate

$$\frac{2}{5} + \frac{3}{4}$$

**Input:**

$(2 \div 5) + (3 \div 4)$  or use the fraction button.

**Output:**

$1.15$  or  $23/20$  (depending on mode)

### 3. Interpret the Calculator Display Appropriately

#### Key Points:

- Understand when the calculator gives a rounded or recurring decimal.
- Interpret **E** as scientific notation (e.g., **3.5E6** means  $3.5 \times 10^6$ ).
- Know when to round or convert to fractions/percentages.
- Know how to switch between decimal and fraction using **S $\leftrightarrow$ D** key.

**Example 4:** Calculator display shows:

0.666666667

**Interpretation:**

This is a recurring decimal  $\approx \frac{2}{3}$

**Example 5:** Calculator displays:

2.4E7

Interpret as:

$$2.4 \times 10^7 = 24,000,000$$

**Tip:** Use the **S $\leftrightarrow$ D** button to toggle between decimal and fraction form when appropriate.

### Summary Tips

Skill	What To Do
Brackets	Always use for grouped expressions
Negative Numbers	Use the correct negative key <b>(-)</b>
Fractions	Use <b>a b/c</b> or divide carefully
Display Interpretation	Recognize decimals, fractions, scientific
Rounding & Approximation	Round only when asked; state correct figures