

## COMMON ERRORS

1.  $\sqrt{A + B} \neq \sqrt{A} + \sqrt{B}$

2.  $\sqrt{A^2 + B^2} \neq A + B$

$$3. (A + B)^2 \neq A^2 + B^2$$

$$4. (A - B)^2 \neq A^2 - B^2$$

$$5. x^2 x^3 \neq x^6$$

$$6. (x^2)^3 \neq x^{(2^3)}$$

$$7. \frac{x^{10}}{x^2} \neq x^5$$

$$8. x^1 \neq 1$$

$$9. x^0 \neq 0$$

$$10. -3^2 \neq (-3)^2$$

$$11. (4x^2) \neq (4x)^2$$

$$12. \sqrt{7x} \neq 7x^{\frac{1}{2}}$$

$$13. \quad \frac{0}{2} \neq \frac{2}{0}$$

$$\frac{\cancel{2x} - 4}{\cancel{2x}} \text{ NO!}$$

14.

15. 
$$\frac{1}{x+y} \neq \frac{1}{x} + \frac{1}{y}$$

16. Distinguish between an **expression**, **equation** and a **function**.



17. Write  $\frac{\frac{a}{b}}{c}$  is a  
meaningless statement. Only  
 $\frac{\left(\frac{a}{b}\right)}{c}$  and  $\frac{a}{\left(\frac{b}{c}\right)}$  are  
meaningful.