BAD FORM IN MATHEMATICS.

Form is important in mathematics to prevent misunderstandings. These mistakes will have academic consequences either in the communications mark or in the question itself.

<u>TYPES OF ERROR</u>   <u>EXAMPLE</u>

1) <u>Misuse of equal signs</u>

a) Omission
$$y = 2\,(5) + 7 - 3$$
$$10 + 7 - 3$$
$$14$$

b) Extra 'equal' signs
$$2x + 7 = x - 5$$
$$= 2x = x - 12$$

c) Equal signs not lined up
$$x = 2x + 9$$
$$= x + 9$$

2) <u>Misuse of Brackets</u> $(3x + 2)(5x - 1$

a) Omission

b) Length of line bracket
$\underline{x\text{-}2 +}$ 3x instead of
$2x$
$\underline{x - 2 + 3x}$
$2x$

   or as in quadratic formula

$x = -b \pm \dfrac{\sqrt{b^2 - 4ac}}{2a}$ instead of

$x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

3) Fractions not reduced to lowest terms
$\dfrac{12}{18}$ instead of $\dfrac{2}{3}$

3. Algebraic expressions not simplified   factor and collect like terms as necessary

3) <u>Radical sign</u>
   a) Too long
$\sqrt{a + 4cd - x}$ instead of

$\sqrt{a + 4cd} - x$

b) Too short

$\sqrt{3ab} - 5x$ instead of $\sqrt{3ab - 5x}$

or

$\dfrac{\sqrt{5x}}{2}$ instead of $\sqrt{\dfrac{5x}{2}}$

c) Meaning

$3\sqrt{2}$ or $\sqrt{2}$ instead of $\sqrt[3]{2}$

5) Radicals not simplified

$\sqrt{18}$ instead of $3\sqrt{2}$

6) Radicals not rationalized

$\dfrac{2}{\sqrt{3}}$ instead of $\dfrac{2\sqrt{3}}{3}$

7) Ordered pairs improperly recorded

2 ,3 or (2 3) instead of (2,3)

8) **Statements not complete, omitted completely, or units left out**

9) Axes improperly labelled or left out altogether

10) Improper notation

Sin = ¾ instead of sin x = ¾
sin x ^{2} instead of $\sin^2 x$

.004 instead of 0.004

{ϕ} instead of { } or ϕ

(x , y) instead of (x_1, y_1)

(-3 <x <3) instead of {x| -3 < x < 3}

AB instead of $\overrightarrow{AB}$

If any of these errors are unclear , or you have questions...Discuss them with your Math Teacher