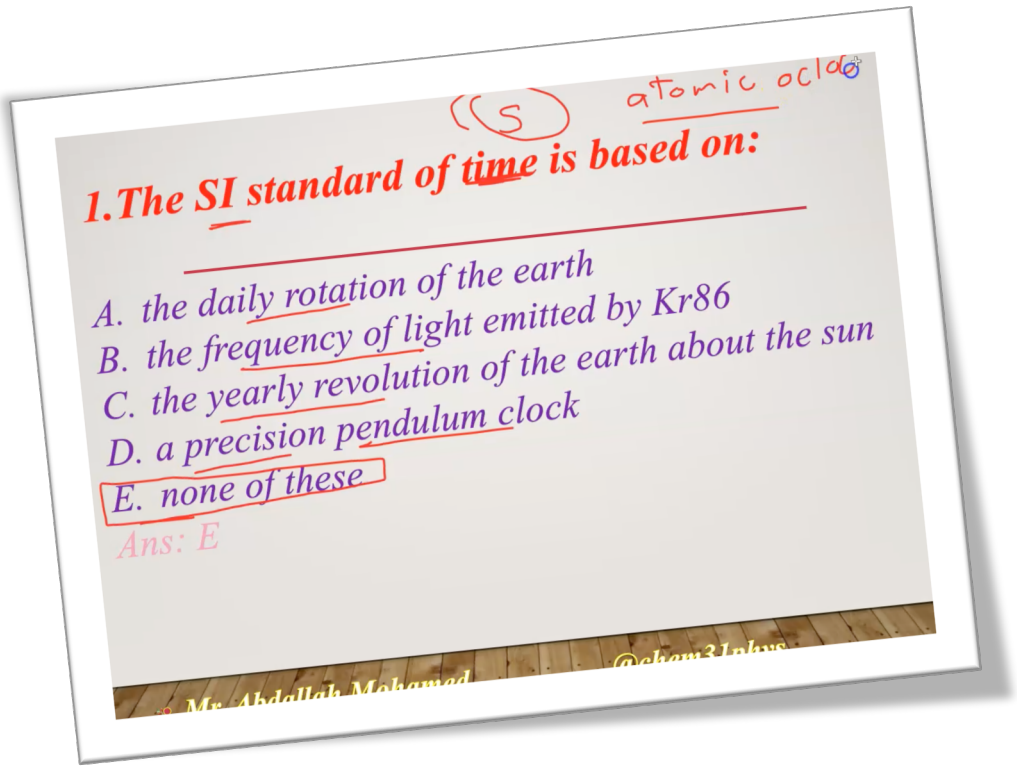

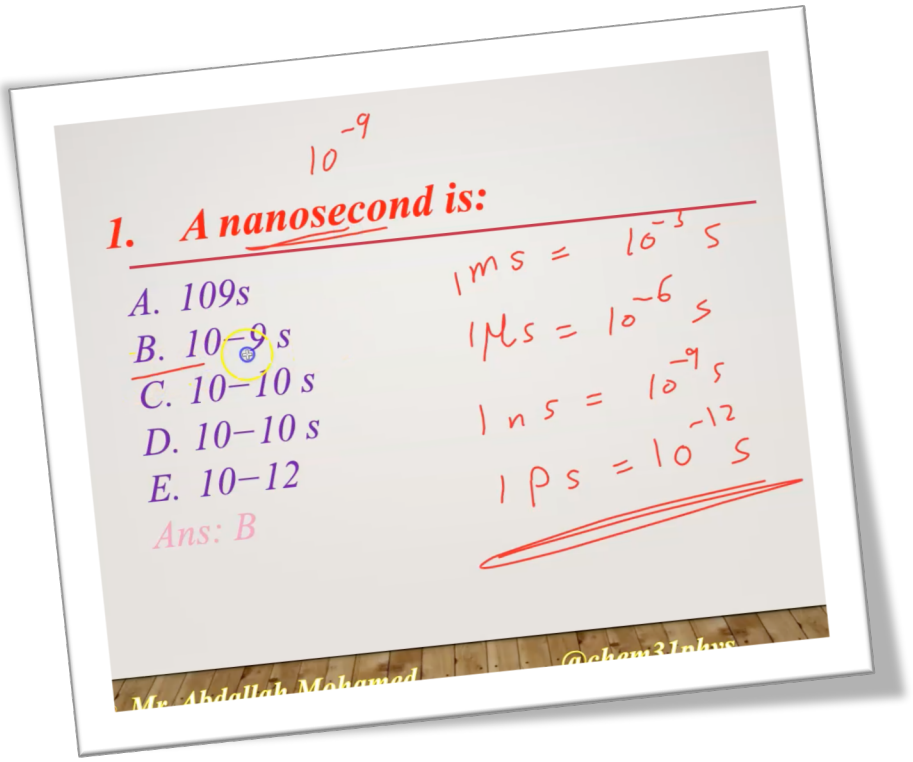

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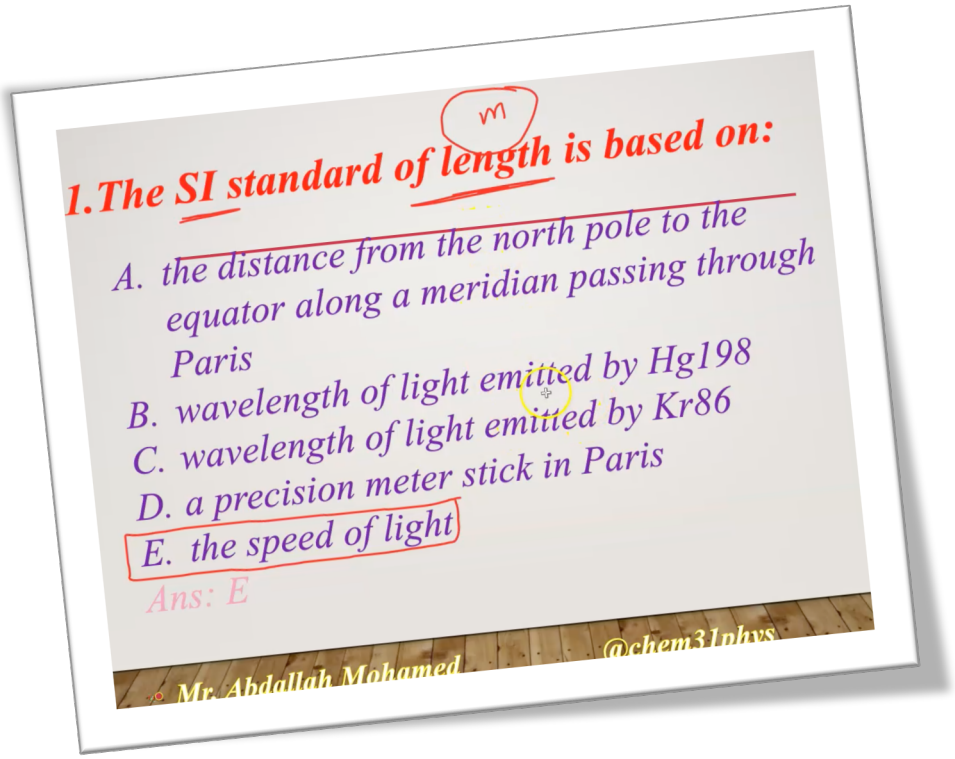

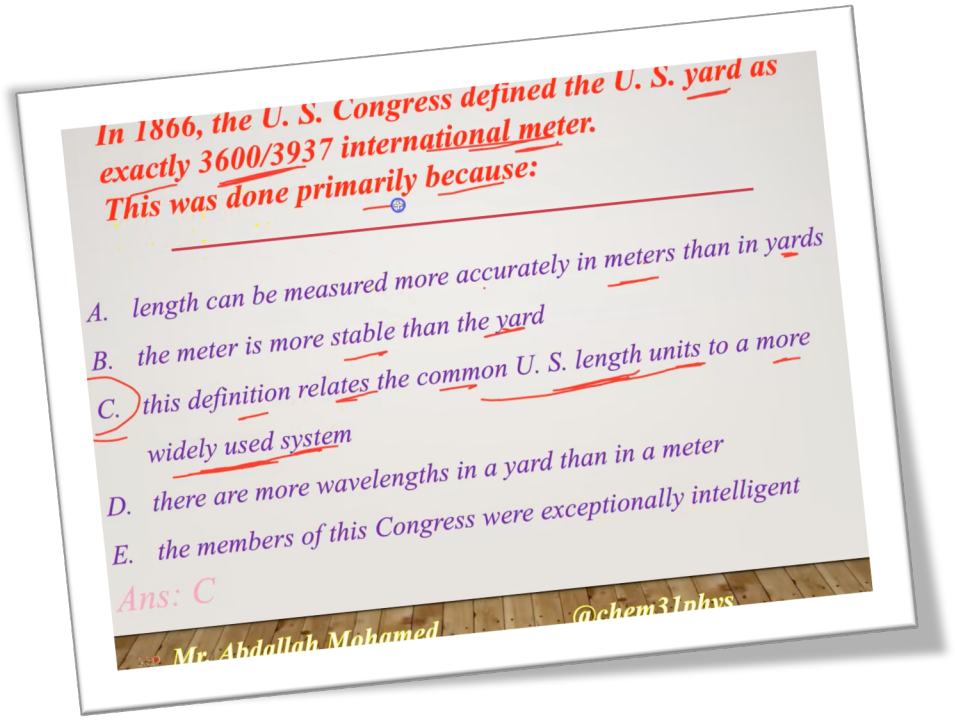

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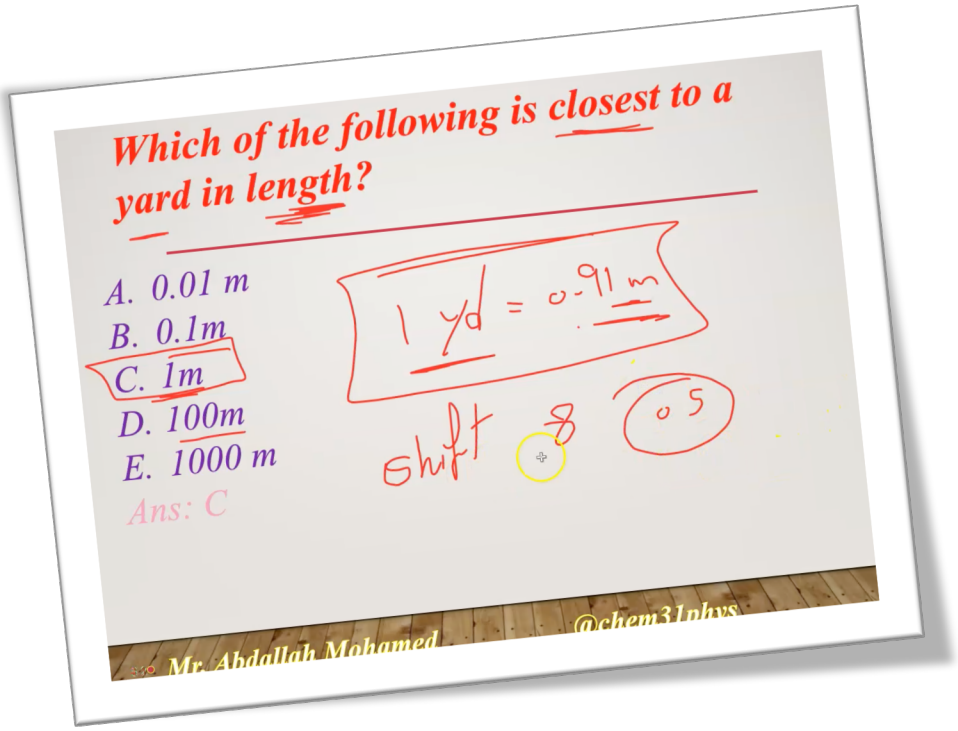

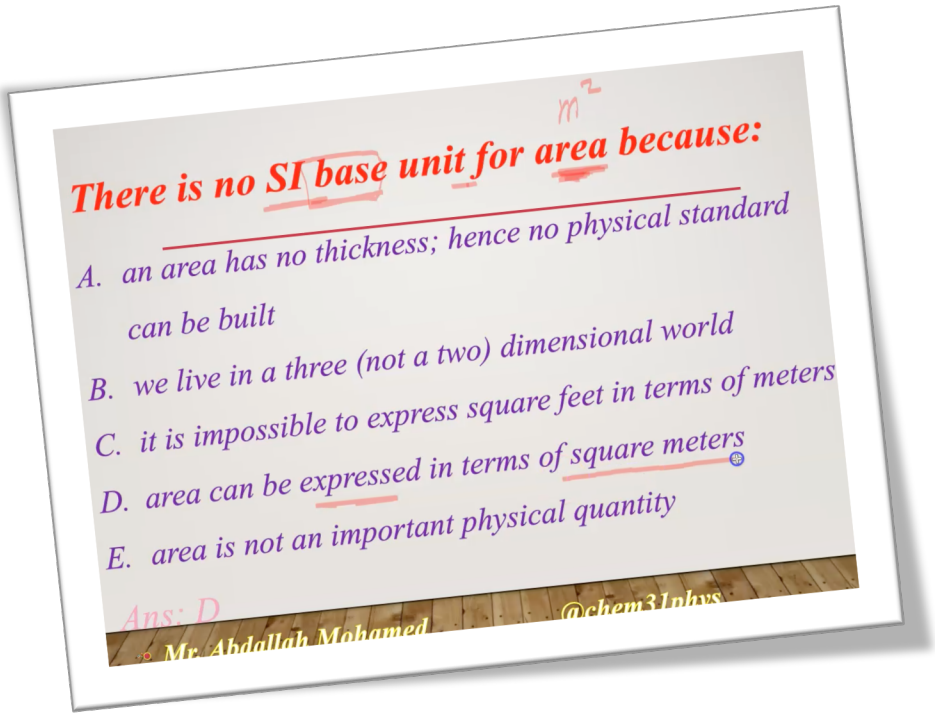

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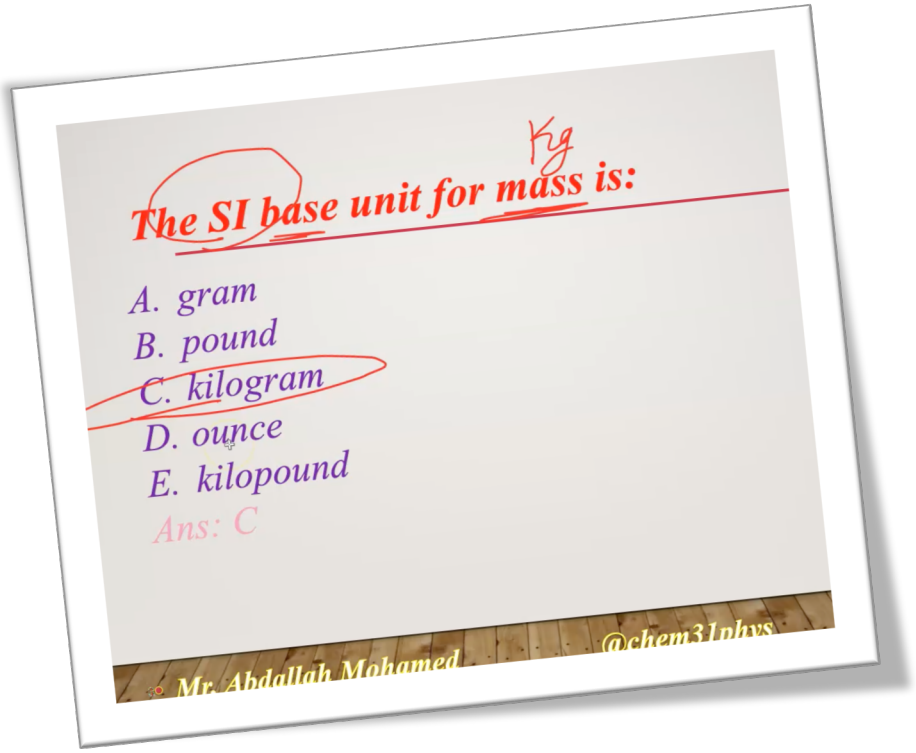

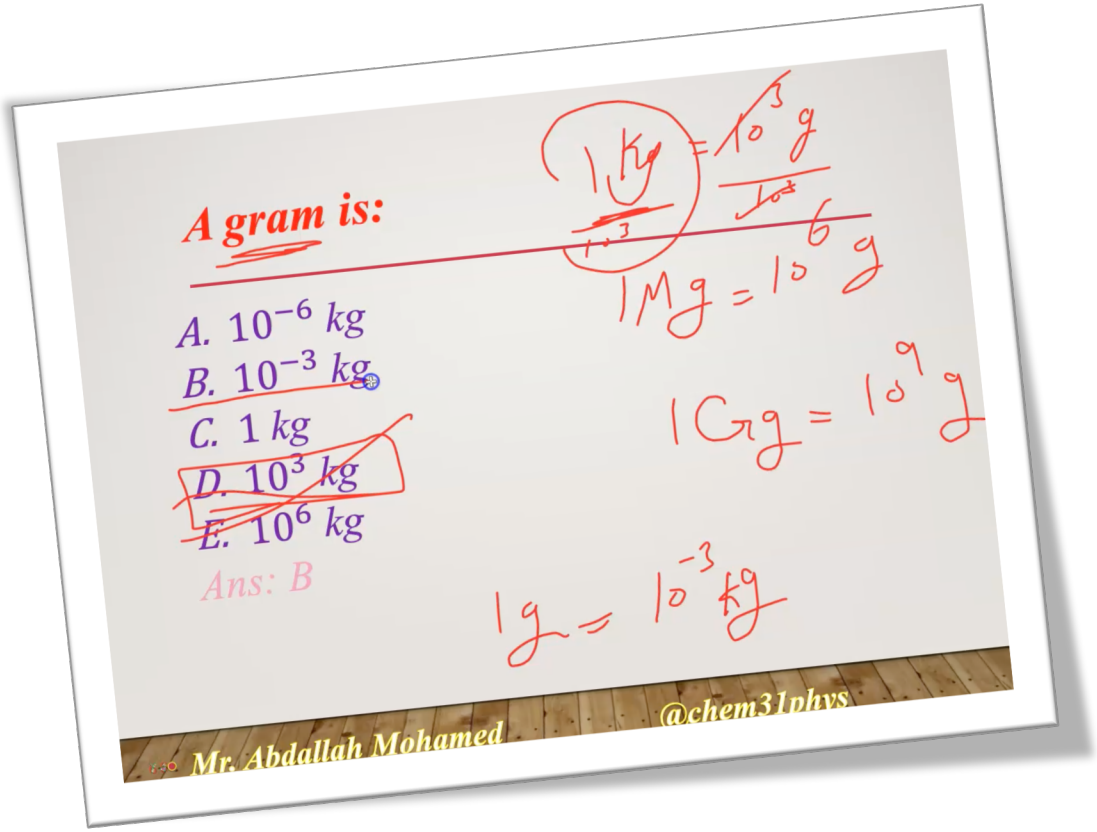

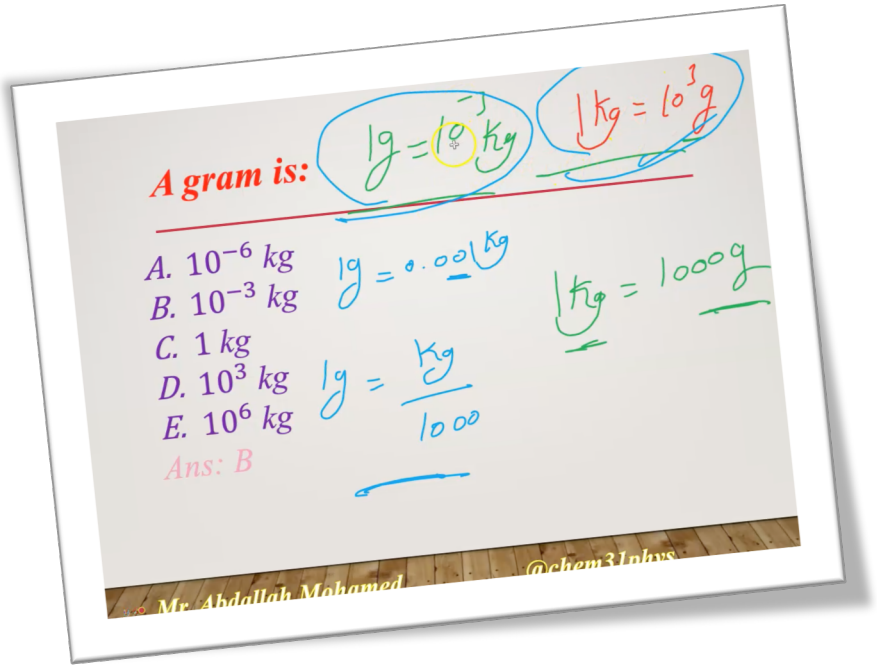

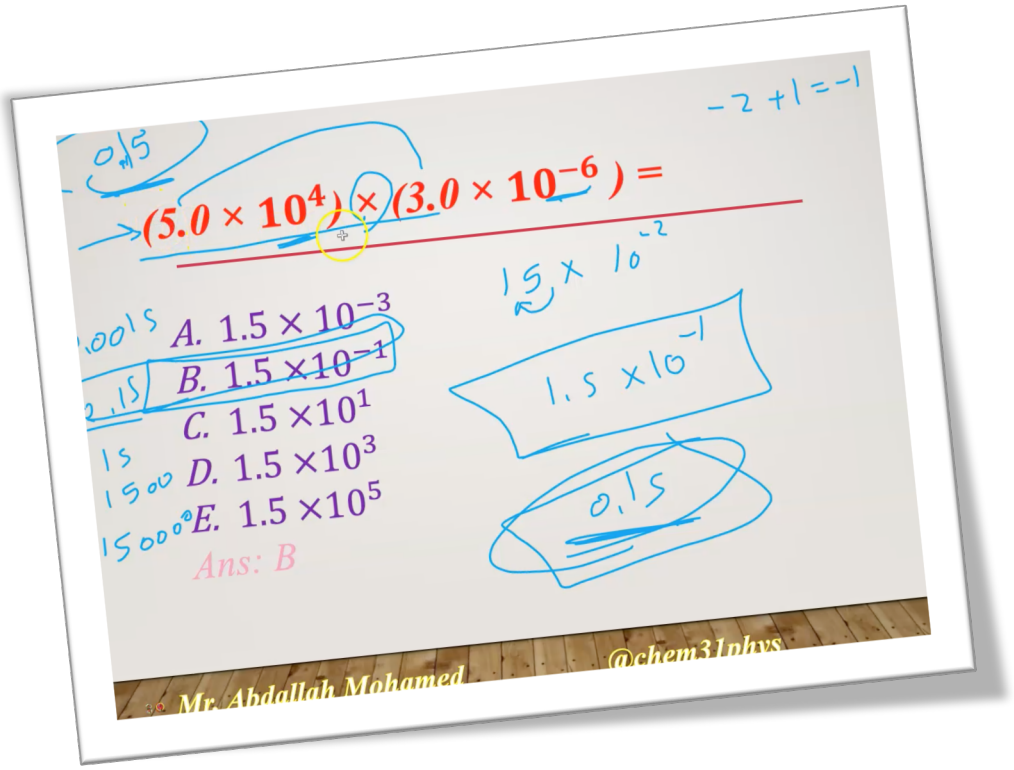

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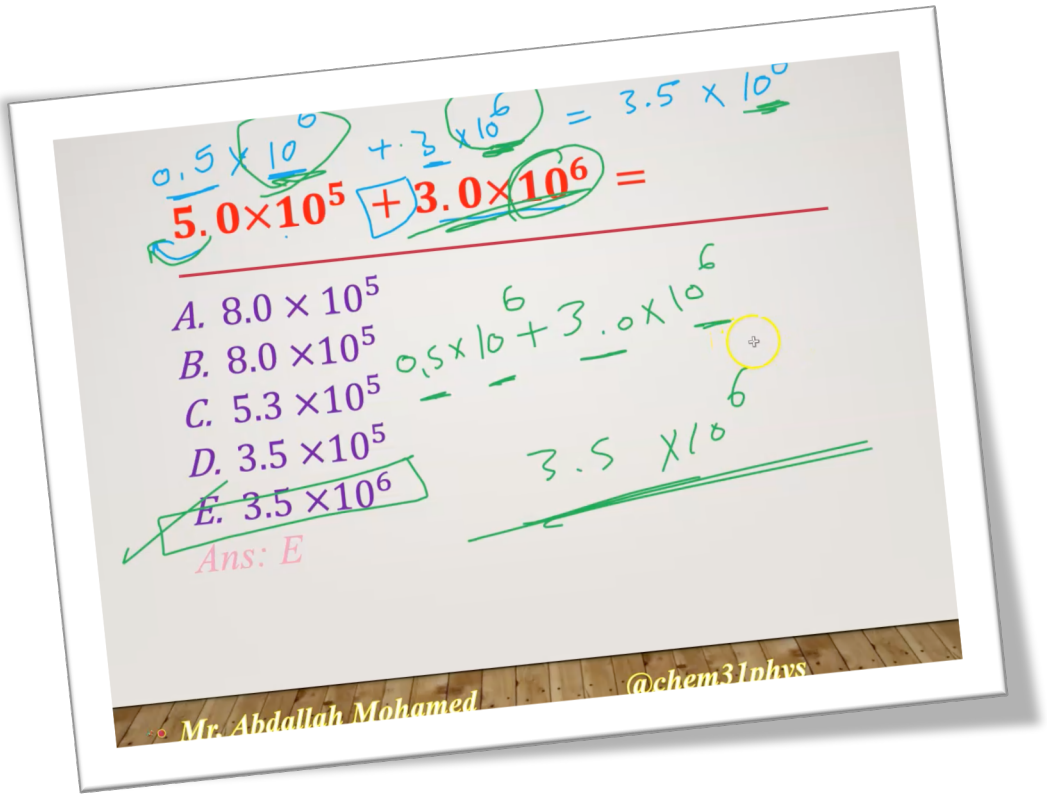

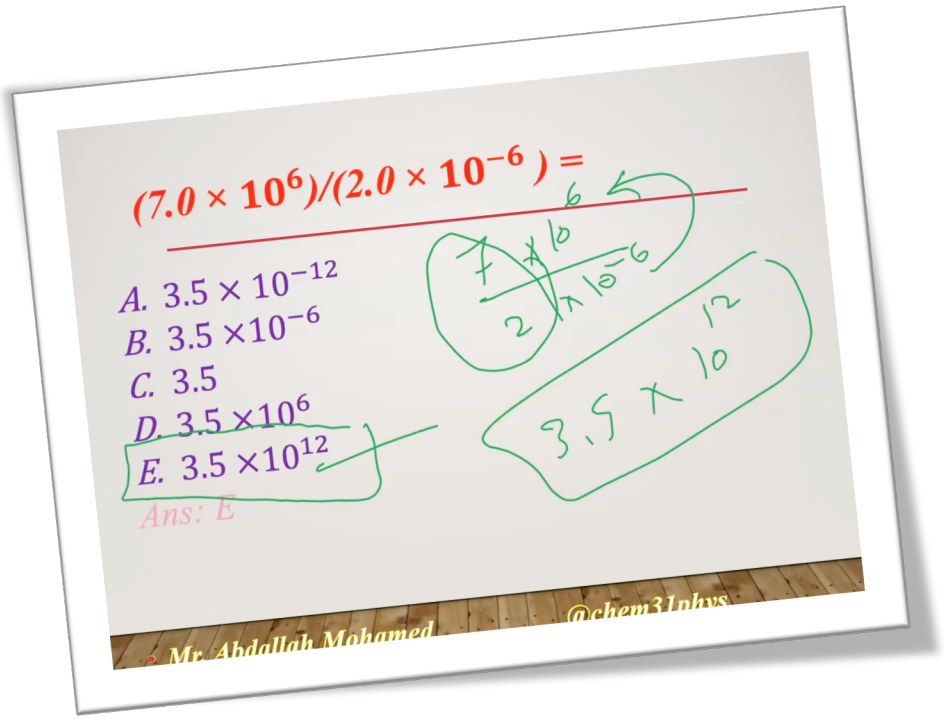

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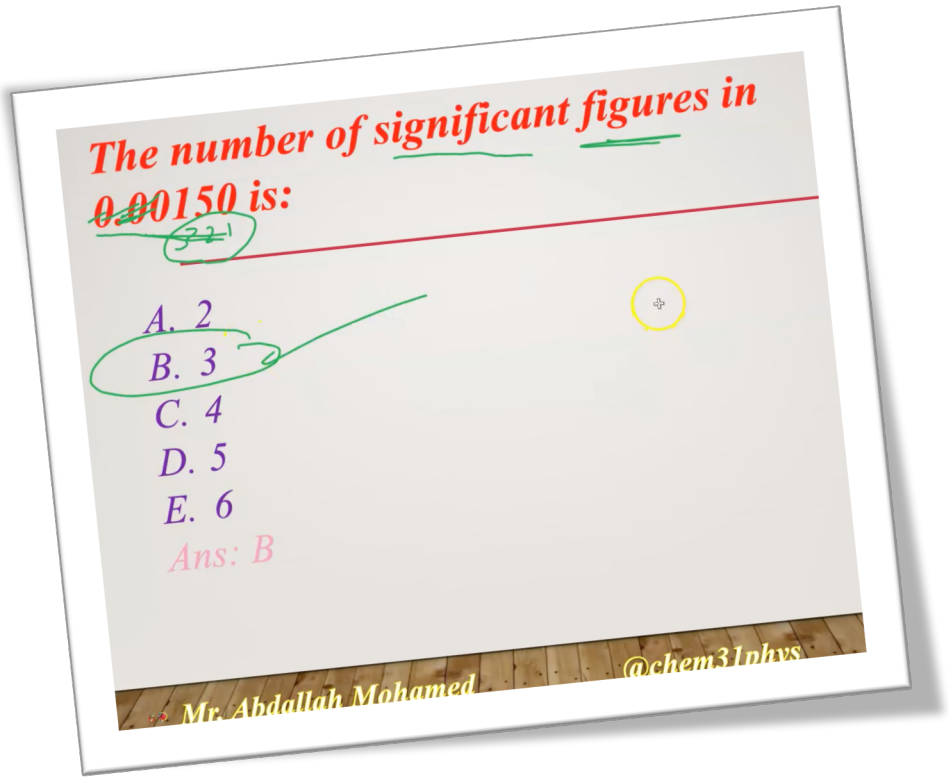

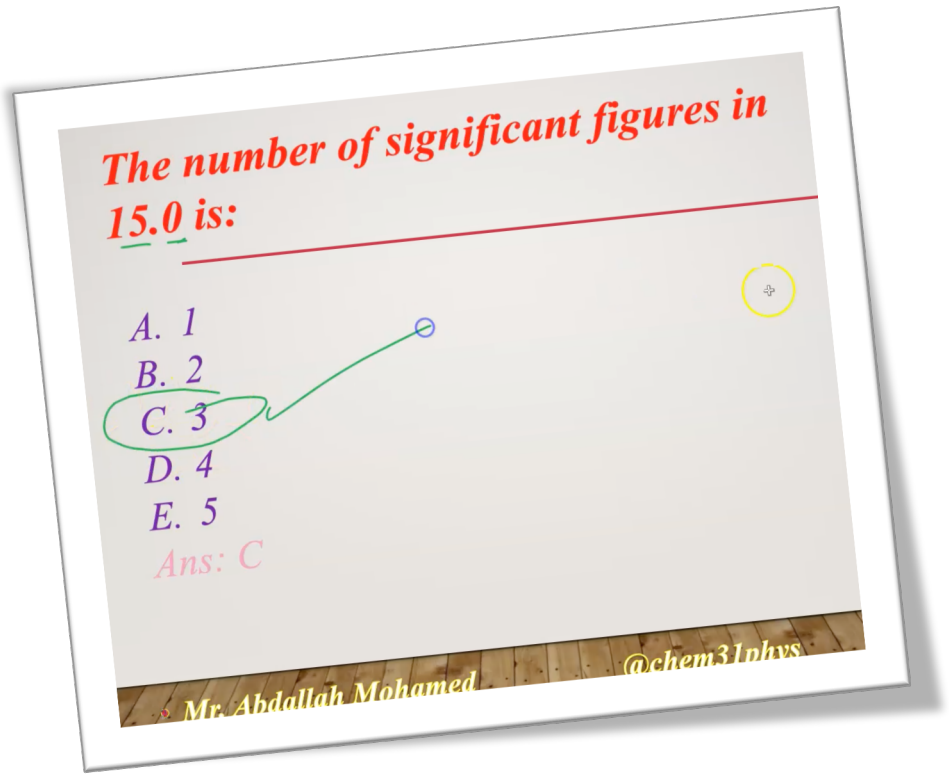

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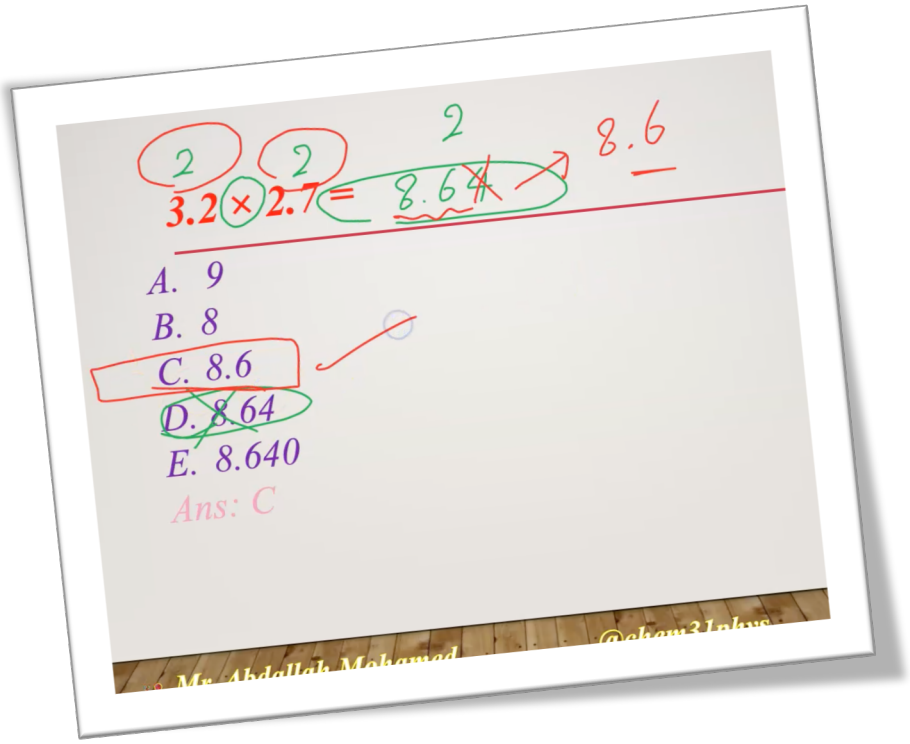

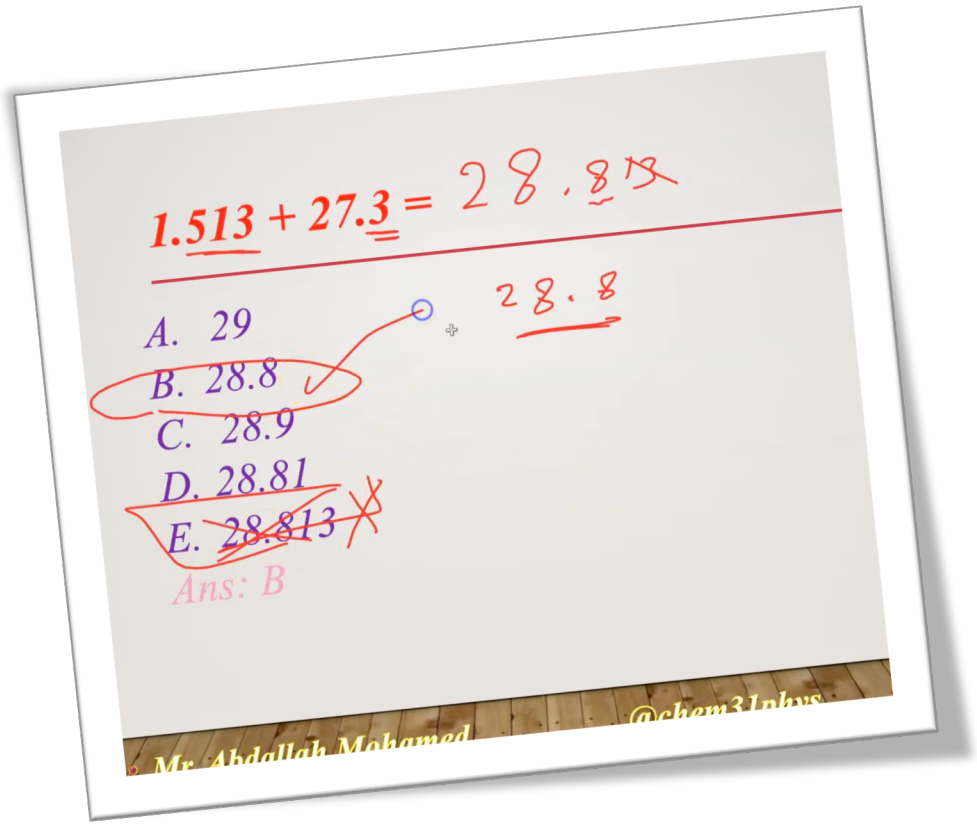

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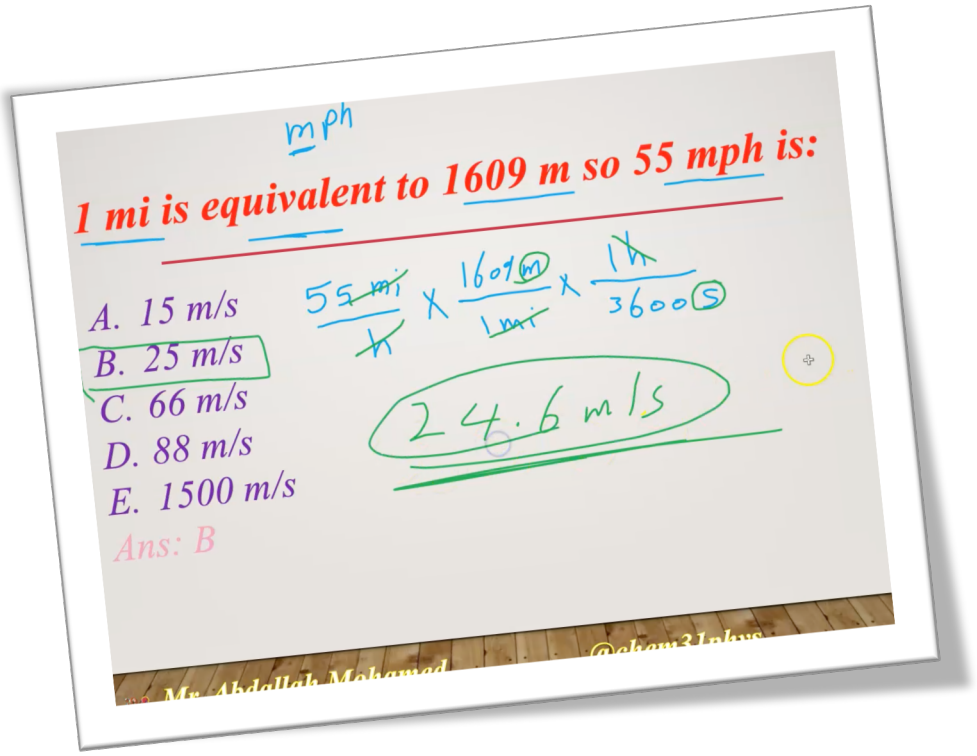
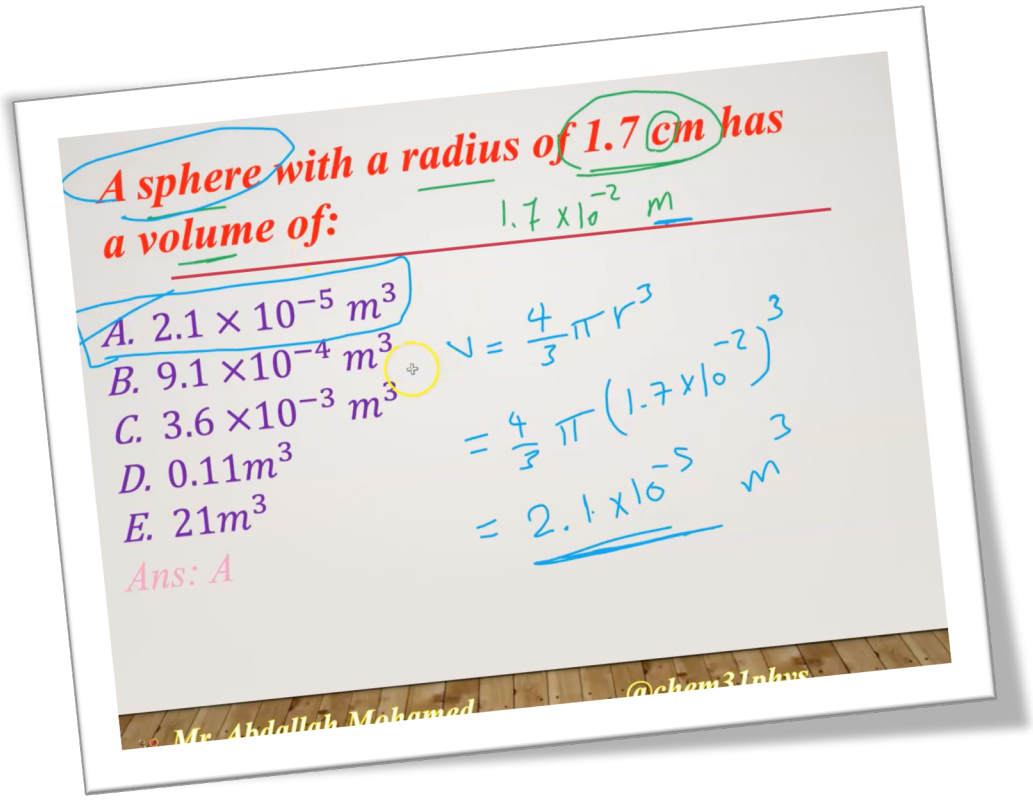




A sphere with a radius of 1.7 cm has a surface area of:

$r = 1.7 \times 10^{-2}$ m

A. $2.1 \times 10^{-5}\ m^2$
B. $9.1 \times 10^{-4}\ m^2$
C. $3.6 \times 10^{-3}\ m^2$
D. $0.11\ m^2$
E. $36\ m^2$

Ans: C

$S.A. = 4\pi r^2$
$= 4\pi (1.7 \times 10^{-2})^2$
$= 3.6 \times 10^{-3}\ m^2$

A right circular cylinder with a radius of 2.3 cm and a height of 1.4 m has a volume of:

A. $0.20\ m^3$
B. $0.14\ m^3$
C. $9.3 \times 10^{-3} m^3$
D. $2.3 \times 10^{-3} m^3$
E. $7.4 \times 10^{-4}\ m^3$

Ans: D

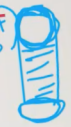
$V = \pi r^2 h$
$= \pi (2.3 \times 10^{-2})^2 (1.4)$
$= 2.33 \times 10^{-3}\ m^3$

A right circular cylinder with a radius of 2.3 cm and a height of 1.4 cm has a total surface area of:

A. $1.7 \times 10^{-3}\ m^2$
B. $3.2 \times 10^{-3}\ m^2$
C. $2.0 \times 10^{-3}\ m^3$
D. $5.3 \times 10^{-3}\ m^2$
E. $7.4 \times 10^{-3}\ m^2$

Ans: D

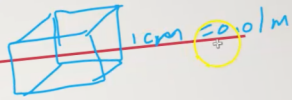
SA $= 2\pi r^2 + 2\pi r h$
$= 2\pi(0.023)^2 + 2\pi(0.023)(0.014)$
$= 5.3 \times 10^{-3}\ m^2$



A cubic box with an edge of exactly 1 cm has a volume of:

A. $10^{-9}\ m^3$
B. $10^{-6}\ m^3$
C. $10^{-3}\ m^3$
D. $10^{3}\ m^3$
E. $10^{6}\ m^3$

Ans: B



$V = L^3 = 0.01^3$
$= 10^{-6}\ m^3$

A square with an edge of exactly 1 cm has an area of:

A. $10^{-6}\ m^2$
B. $10^{-4}\ m^2$
C. $10^{2}\ m^2$
D. $10^{4}\ m^2$
E. $10^{6}\ m^2$

Ans: B

$A = l^2 = 10^{-2} \times 10^{-2} = 10^{-4}\ m^2$

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1 m is equivalent to 3.281 ft. A cube with an edge of 1.5 ft has a volume of:

A. $1.2\times102\ m3\ 10^{2}\ m^3$
B. $9.6 \times 10{-}2\ m3\ 10^{-2}\ m^3$
C. $10.5\ m^3$
D. $9.5 \times 10^{-2}\ m^3$
E. $0.21\ m^3$

Ans: B

$V = L^3 = 1.5^3\ ft^3$

$1.5^3\ ft^3 \times \frac{1^3\ m^3}{3.281^3\ ft^3} = 0.096\ m^3$

$9.6 \times 10^{-2}\ m^3$

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شاهد الشرح هنا