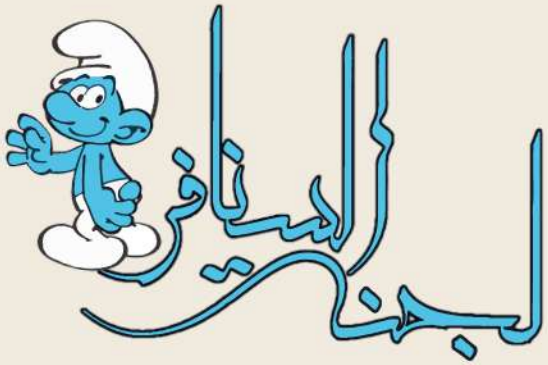
خدمتكم طريق خضناه لرضى الله

2021

أسئلة سنوات

ميد

كيمياء عامة



سنافر البوليتكنك

بسم الله الرحمن الرحيم

نقدم لكم نحن أسرة فريق

(لجنة السنافر)

مجموعة أسئلة اختبارات إلكترونية تم تجميعها خلال الفصول الماضية
سائلين المولى أن يوفقنا وإياكم لكل خير

تنويه

يوجد بعض الأسئلة عليها إجابات قد تحتمل الصواب وقد تحتمل الخطأ

فإن أصبنا فما هو إلا توفيق من الله

وإن أخطأنا فمن أنفسنا

#خدمتكم_طريق_خضناه_لرضى_الله

#الإتجاه_الاسلامي

#بسواعدنا_نبنيها

#لجنة_السنافر

#هي_لله

All of the orbitals in a given shell have the same value for their _____ quantum number.

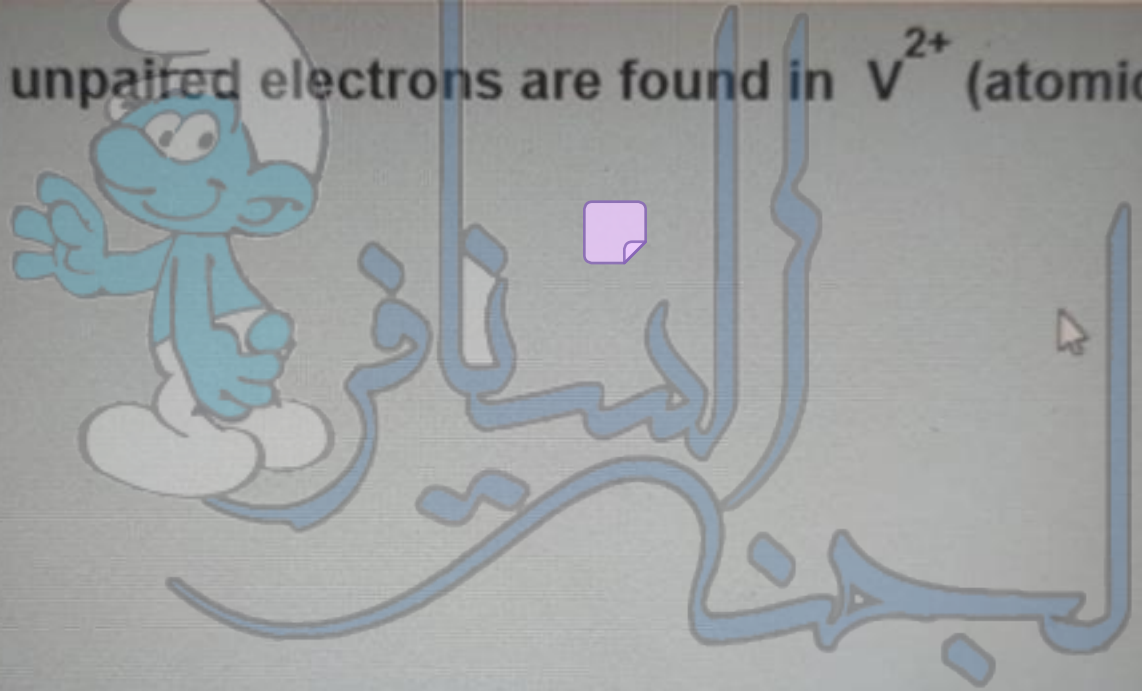
Select one:

- Secondary (Angular) (L)
- Spin (ms)
- Principal (n)
- Magnetic (mL)

How many unpaired electrons are found in V^{2+} (atomic number = 23)

Select one:

- 0
- 1
- 3
- 4
- 2



In the reaction

$$AsF_3 + CCl_4 \Longrightarrow AsCl_3 + CCl_2F_2,$$

If the theoretical yield of CCl_2F_2 was 1.68 moles, and the percent yield in the reaction was 74.3%, how many grams of CCl_2F_2 (121 g/mol?) were actually obtained

اختر أحد الخيارات

- 151
- 203
- 303
- 167
- 273

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اخترأحد الخيارات

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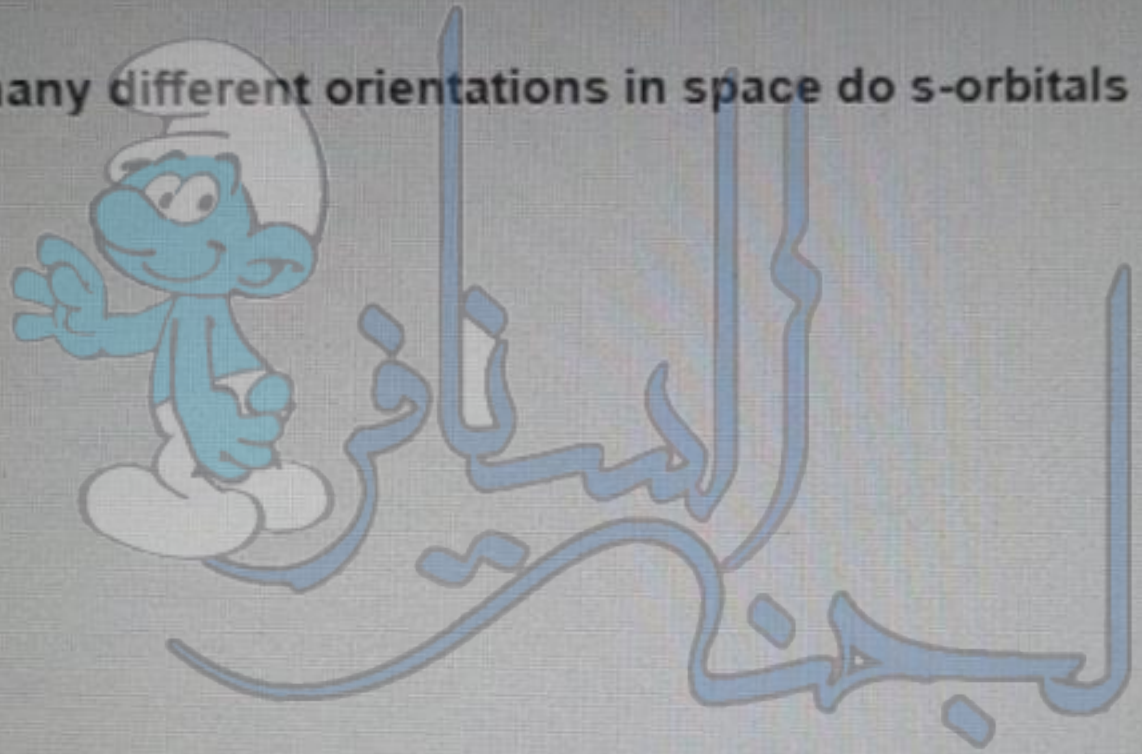
How many different orientations in space do s-orbitals have?



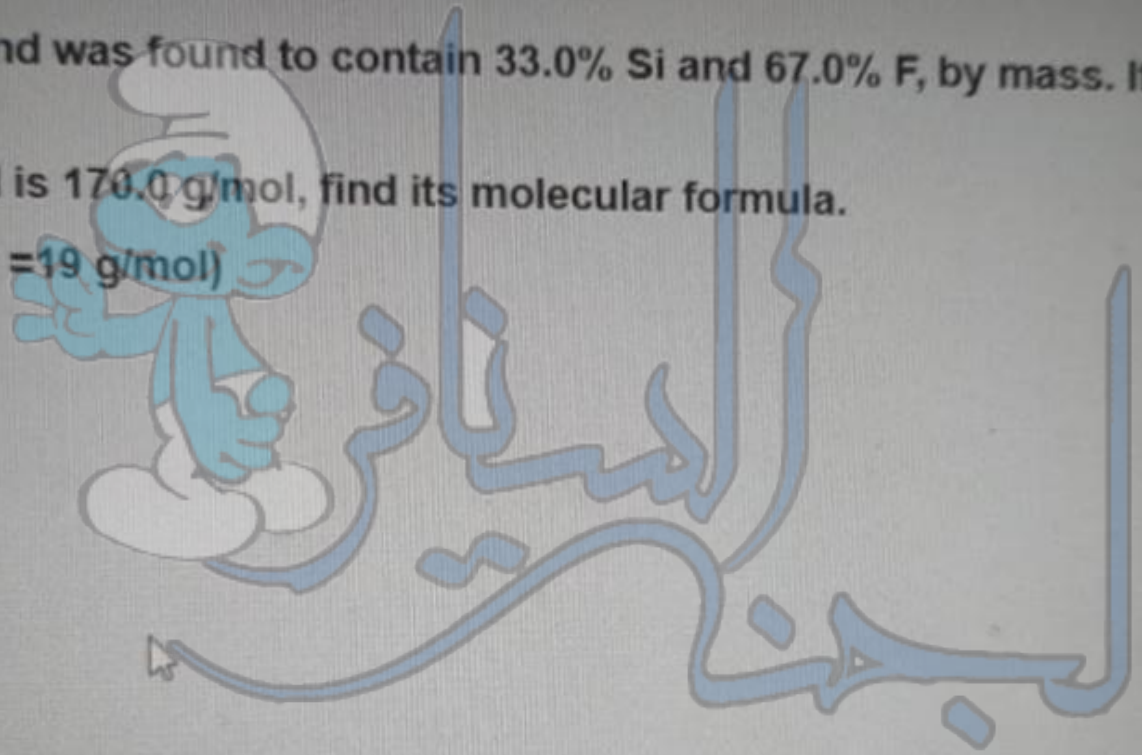
Select one:

- 5
- 2
- 7
- 1
- 3

A compound was found to contain 33.0% Si and 67.0% F, by mass. If the molar mass of the

compound is 170.0 g/mol, find its molecular formula.

(Si = 28 , F =19 g/mol)



Select one:

- SiF_3
- Si_2F_6
- Si_3F_9
- SiF_2
- Si_2F_4

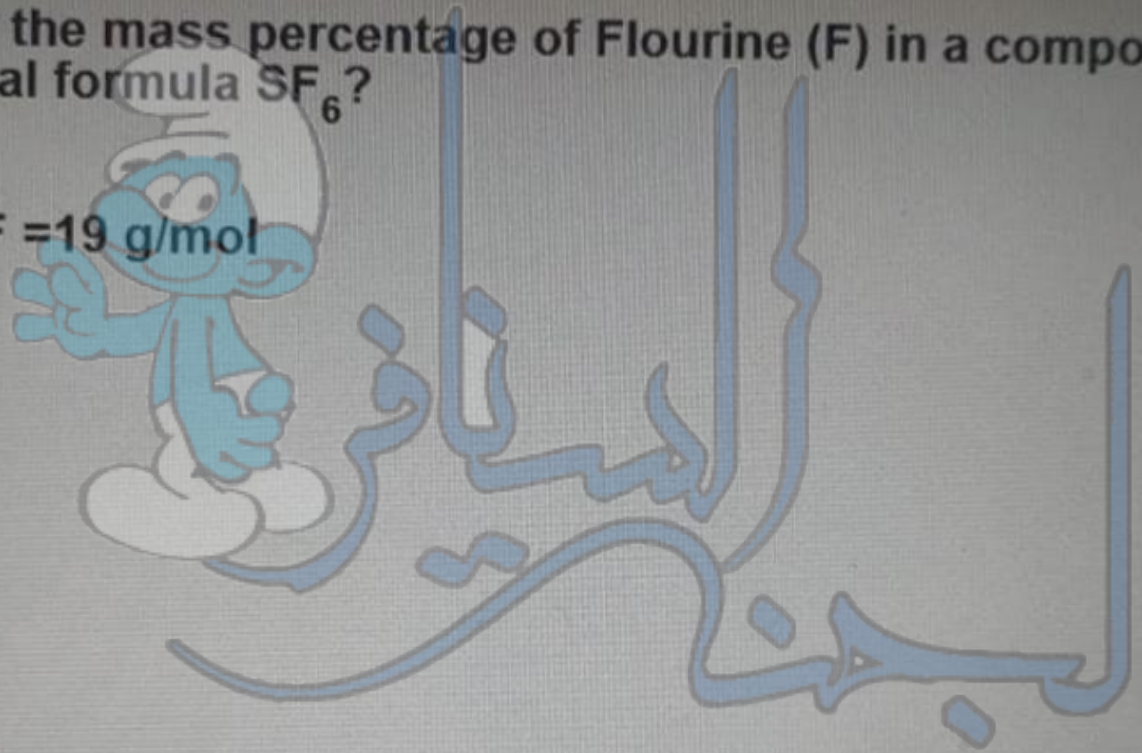
Which of the following is ?not an empirical formula

اختر أحد الخيارات

- C_4H_8O
- $C_2N_2H_8$
- Sb_2S_3
- $BeCr_2O_7$
- MoO_2Cl_2

What is the mass percentage of Flourine (F) in a compound with the empirical formula SF_6?

S =32, F =19 g/mol

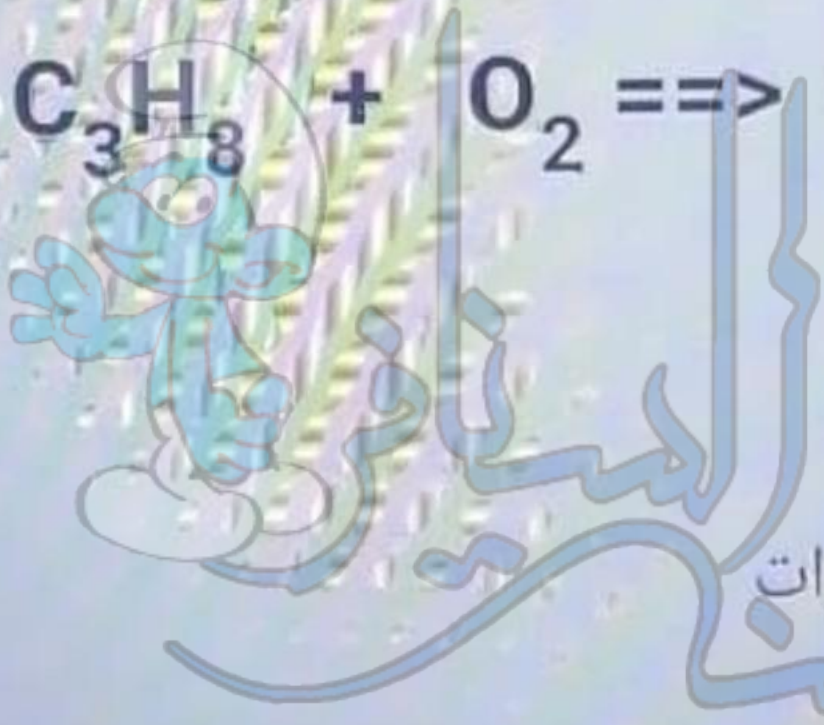


Select one:

- 29.67%
- 36.00%
- 21.95%
- 78.08%
- 25.23%

The correct coefficient that balanced The O_2 in the chemical equation for the reaction below.

$$C_3H_8 + O_2 \Longrightarrow CO_2 + H_2O$$



اخترأحد الخيارات

12

19

14

7

5

You are given the balanced chemical equation:

$$C_4H_4 + 5\,O_2 \Longrightarrow 4\,CO_2 + 2\,H_2O$$

If 0.36 moles of C_4H_4 are allowed to react with 2.82 moles of O_2, what is the mass of water produced (in grams)?

molar mass of water =18 g/mol

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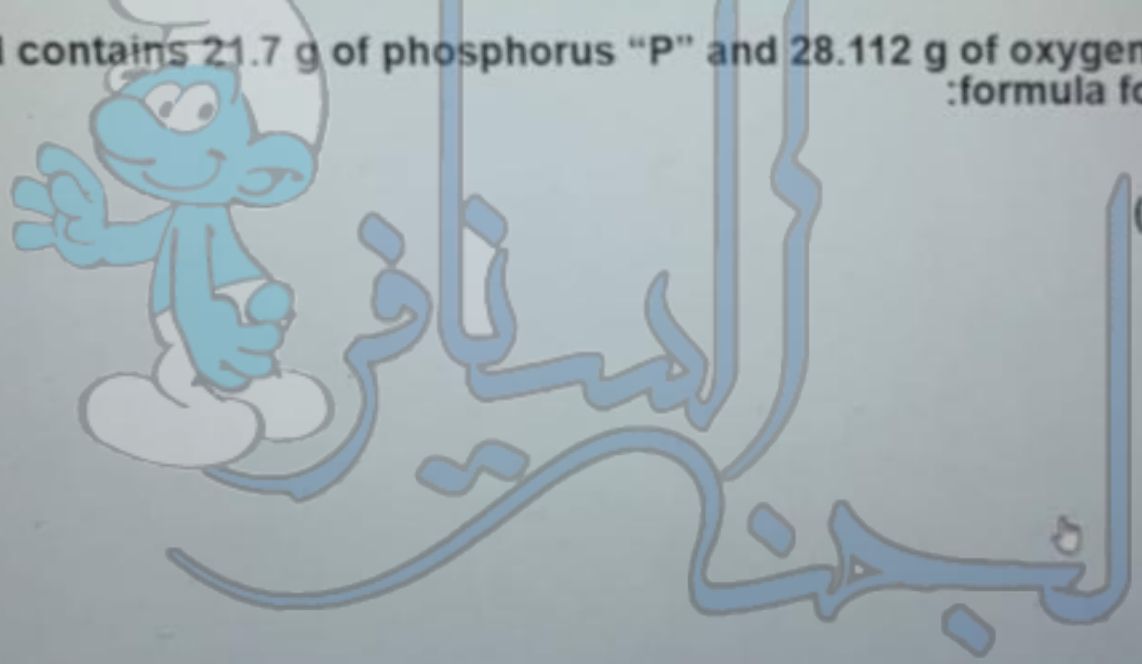
- 13.20
- 19.64
- 12.96
- 65.50
- 11.02

A compound contains 21.7 g of phosphorus "P" and 28.112 g of oxygen "O". The empirical formula for this compound is:

(P= 31, O= 16 g/mol)

اختر أحد الخيارات

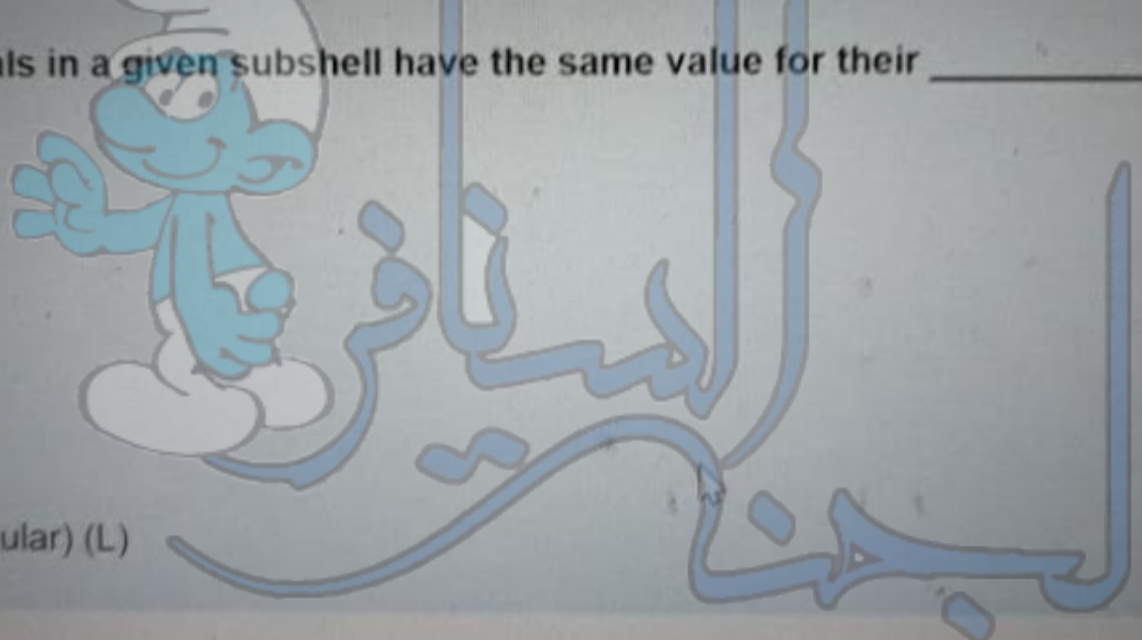
- PO_3
- P_2O
- P_2O_3
- P_3O_2
- P_2O_5



All of the orbitals in a given subshell have the same value for their _____ quantum number.

Select one:

- Magnetic (mL)
- Principal (n)
- Spin (ms)
- Secondary (Angular) (L)



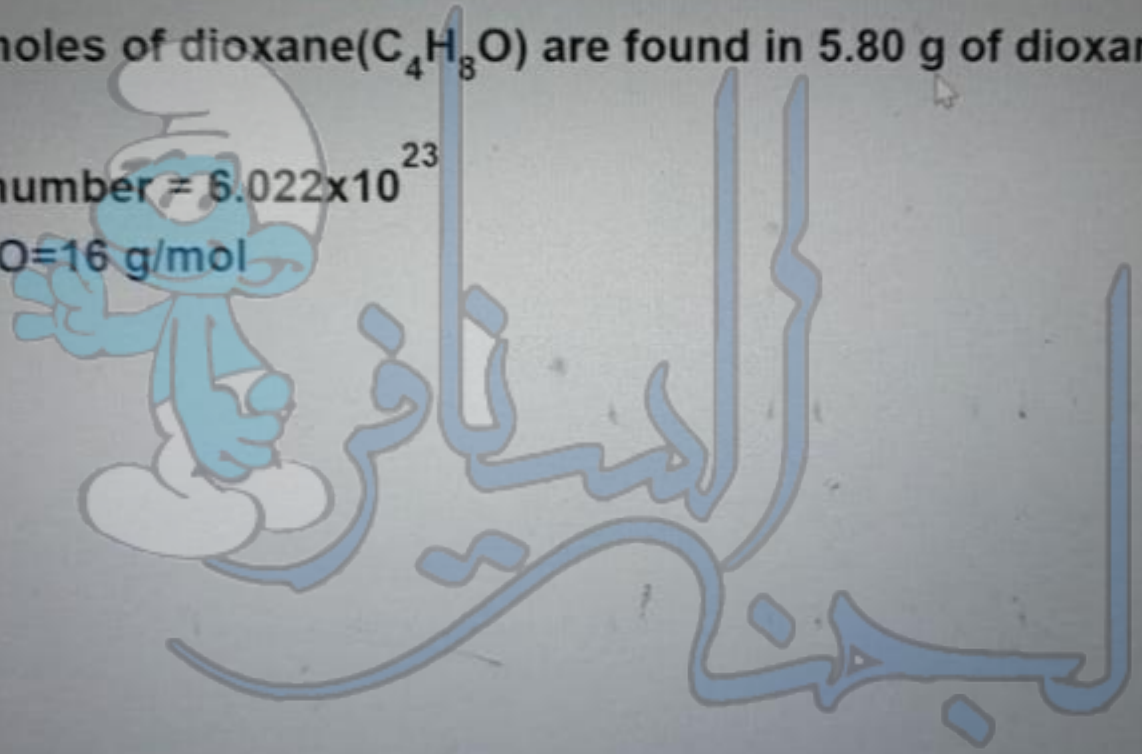
How many moles of dioxane(C_4H_8O) are found in 5.80 g of dioxane (C_4H_8O)?

Avogadro's number = 6.022×10^{23}

C = 12, H=1, O=16 g/mol

Select one:

- 0.64 mol
- 0.58 mol
- 0.78 mol
- 0.064 mol
- 0.081 mol



In the reaction

$AsF_3 + CCl_4 \Longrightarrow AsCl_3 + CCl_2F_2$,

If the theoretical yield of CCl_2F_2 was 1.68 moles, and the percent yield in the reaction was 74.3%, grams of CCl_2F_2 (121 g/mol) were actually obtained?

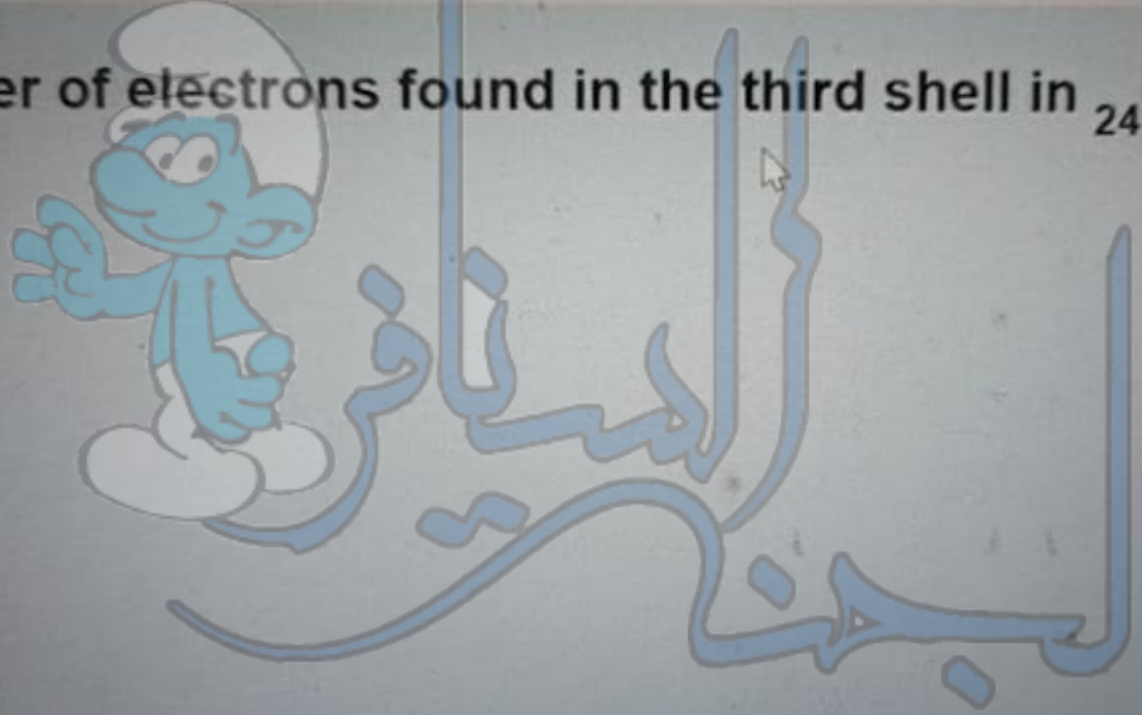
Select one:

- 273
- 167
- 303
- 151
- 203

The number of electrons found in the third shell in $_{24}Cr$ is:

Select one:

- 13
- 10
- 16
- 18
- 8



In the reaction

$AsF_3 + CCl_4 \Longrightarrow AsCl_3 + CCl_2F_2$,

If the theoretical yield of CCl_2F_2 was 1.68 moles, and the percent yield in the reaction was 82.2 %, how many grams of CCl_2F_2 (121 g/mol) were actually obtained?

Select one:

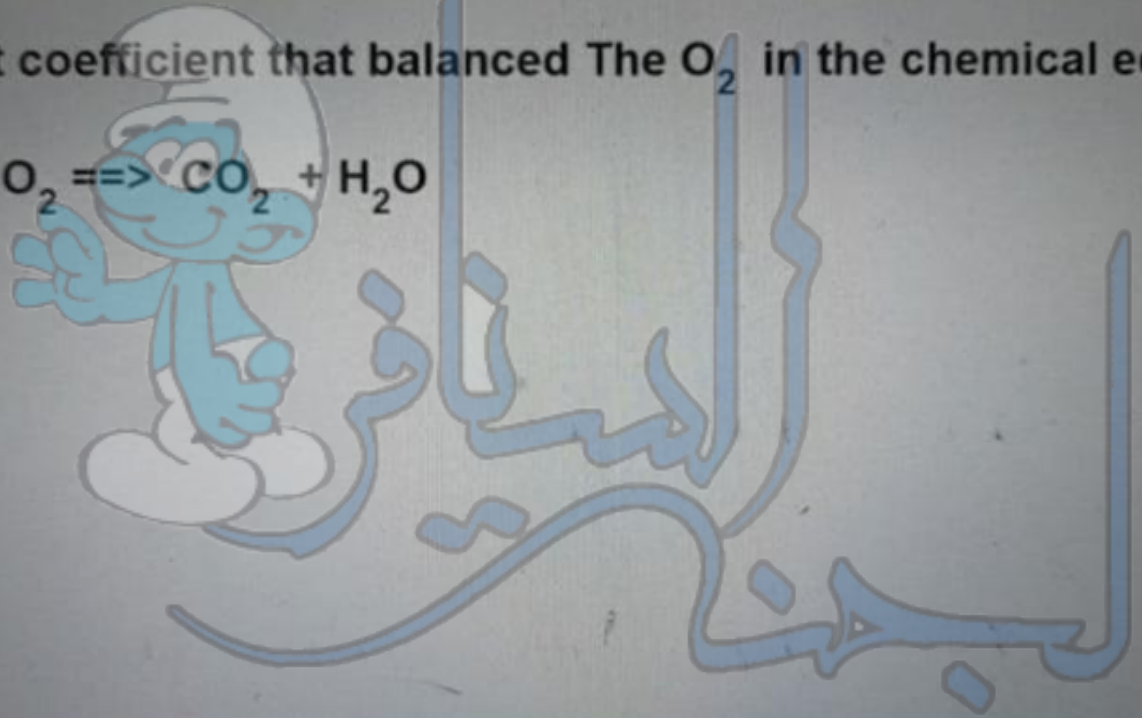
- 167
- 203
- 273
- 151
- 303

The correct coefficient that balanced The O_2 in the chemical equation for the react
below.

$$C_3H_8 + O_2 \Longrightarrow CO_2 + H_2O$$

Select one:

- 19
- 12
- 14
- 5
- 7



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(Si = 28 , F =19 g/mol)

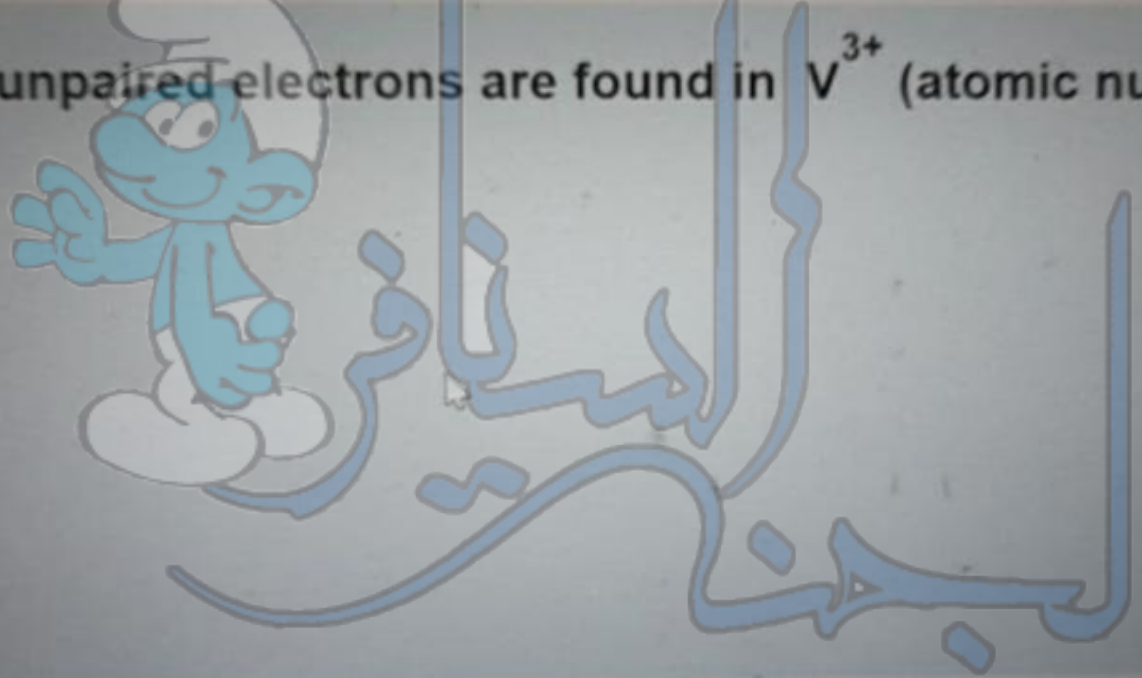
Select one:

- Si_2F_6
- SiF_2
- SiF_3
- Si_2F_4
- Si_3F_9

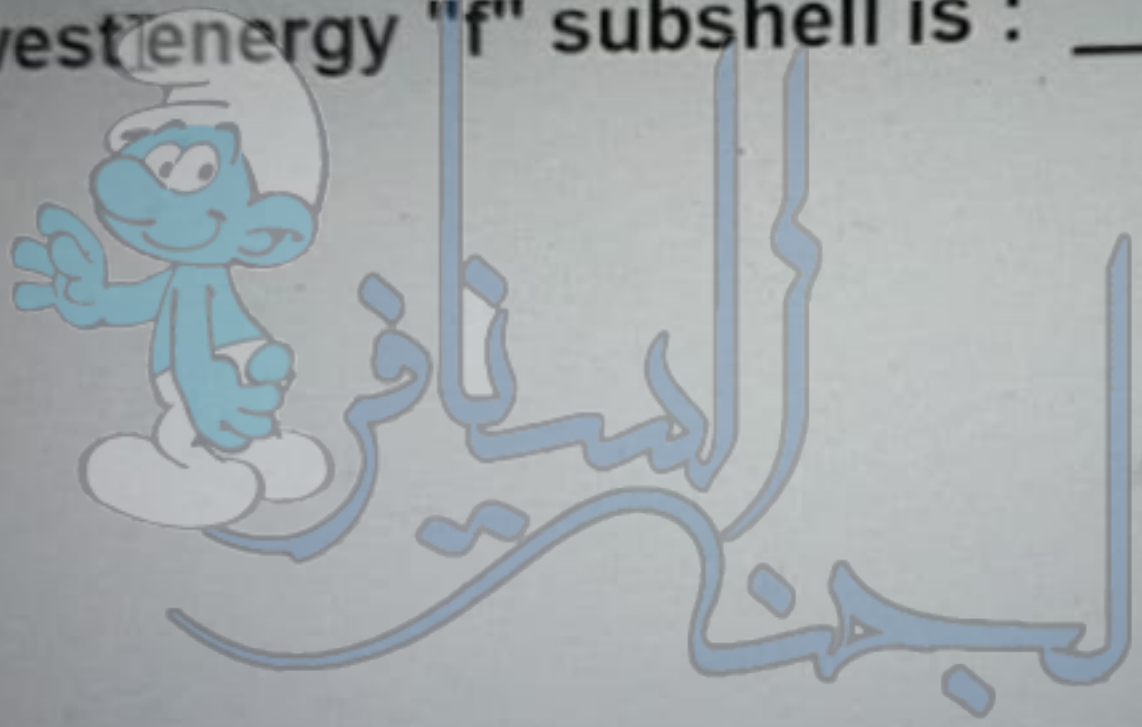
How many unpaired electrons are found in V^{3+} (atomic number = 23)

Select one:

- 0
- 4
- 2
- 3
- 1



The lowest energy "f" subshell is : ____f



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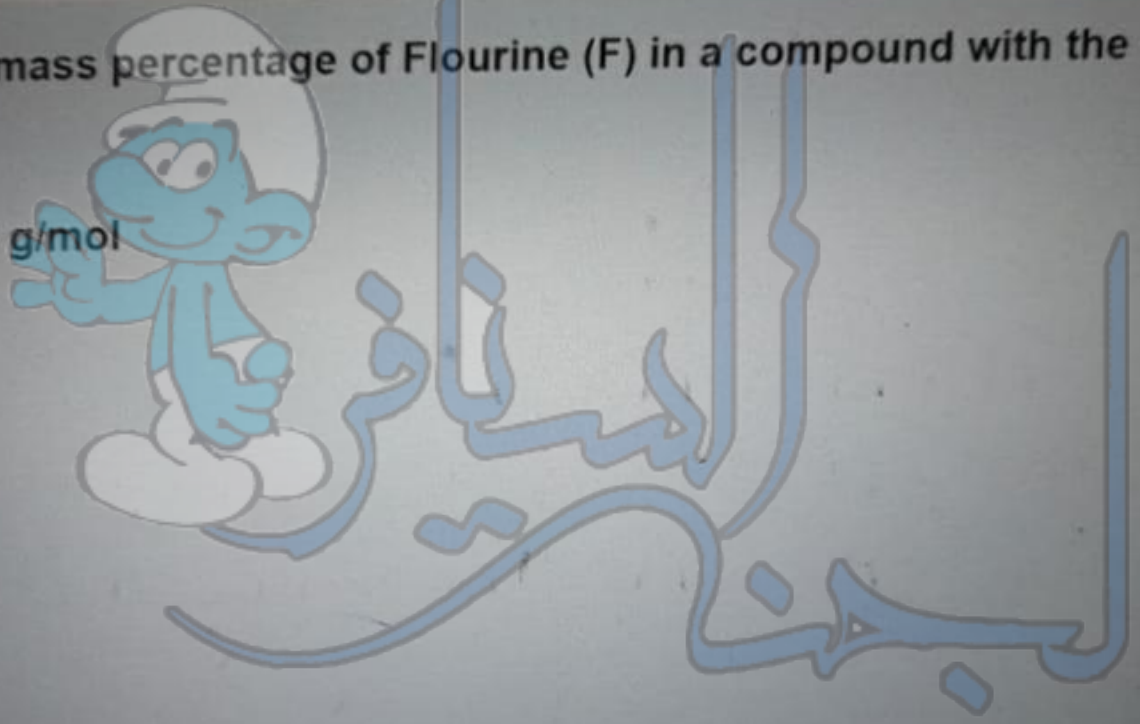


Select one:

- 36.00%
- 29.67%
- 21.95%
- 78.08%
- 25.23%

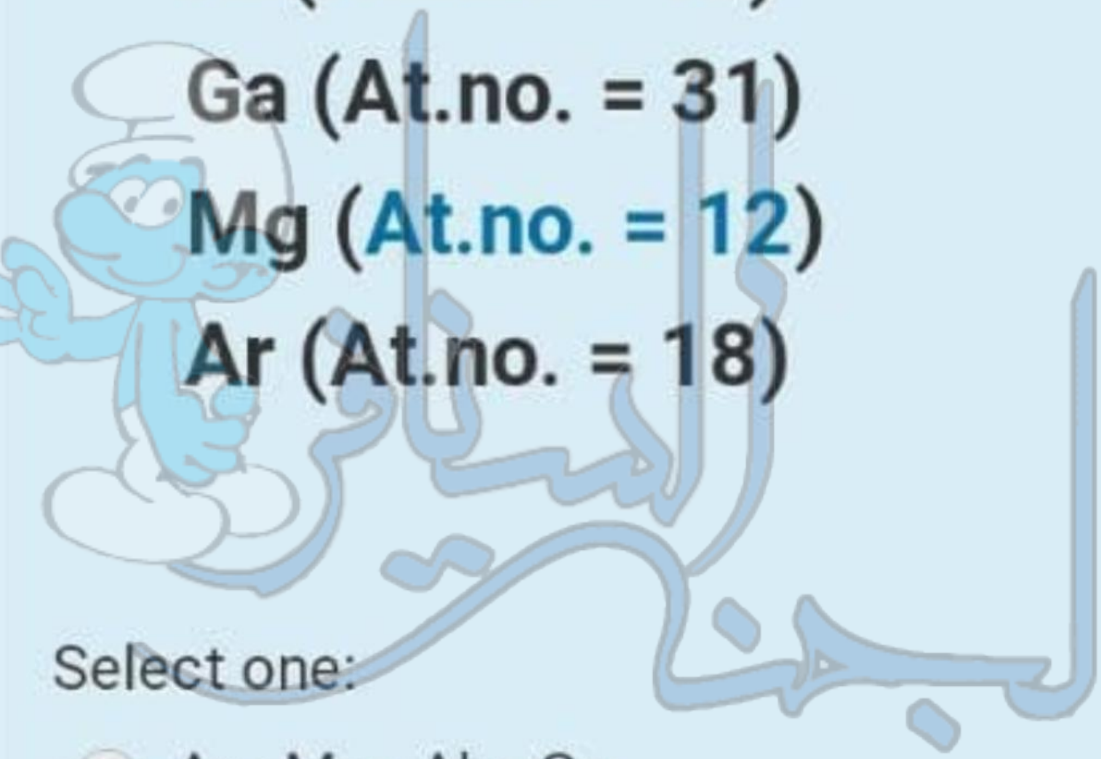
Arrange the following atoms according to decrease in their ionization energies

Al (At.no. = 13)

Ga (At.no. = 31)

Mg (At.no. = 12)

Ar (At.no. = 18)



Select one:

- Ar >Mg> Al > Ga
- Mg > Al> Ga > Ar
- Ga> Mg > Al > Ar
- Ar >Al> Mg > Ga
- Al> Mg > Ar> Ga

Which of the following is not an empirical formula?

Select one:

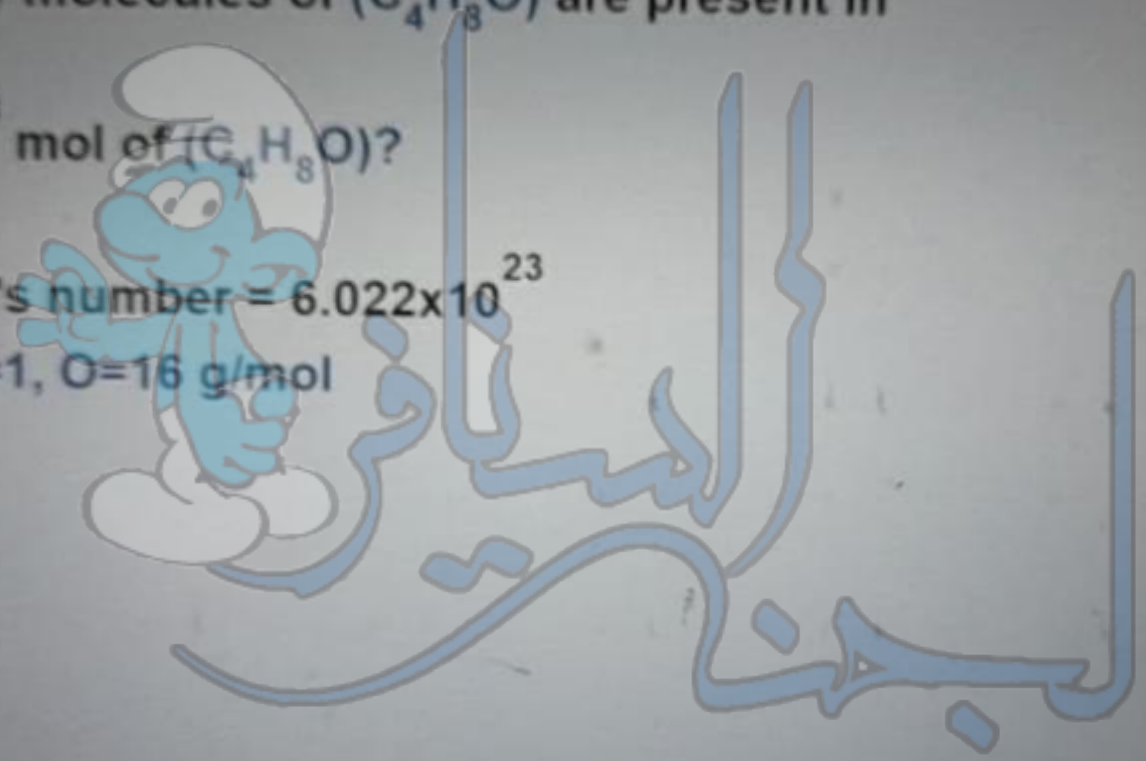
- MoO_2Cl_2
- C_4H_8O
- $C_2N_2H_8$
- $BeCr_2O_7$
- Sb_2S_3

How many molecules of (C_4H_8O) are present in

2.00×10^{-8} mol of (C_4H_8O)?

Avogadro's number = 6.022×10^{23}

C = 12, H=1, O=16 g/mol



Select one:

- 1.67×10^{13}
- 1.20×10^{16}
- 1.20×10^{15}
- 1.67×10^{16}
- 3.01×10^{14}

Down the group (from top to bottom) the electron affinity _____

Select one:

- remains constant because effective nuclear charge is constant
- increases due to increase of number of shells
- decreases then increases
- decreases because number of shells increase
- increase because effective nuclear charge increases

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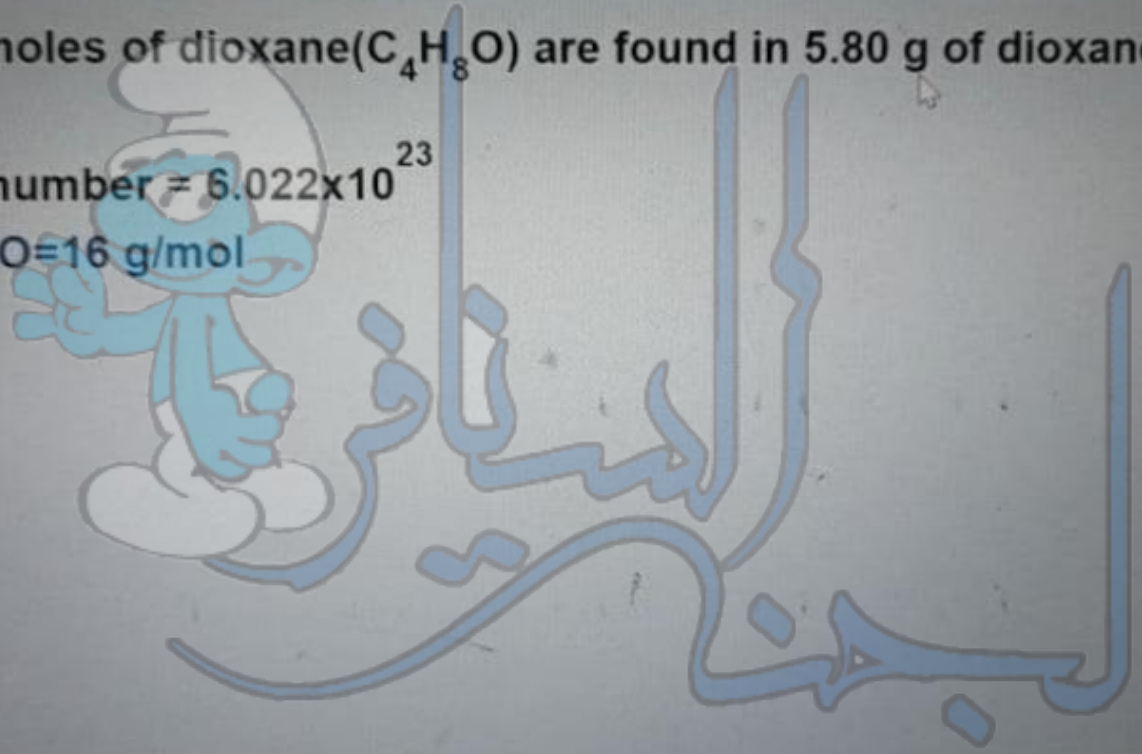

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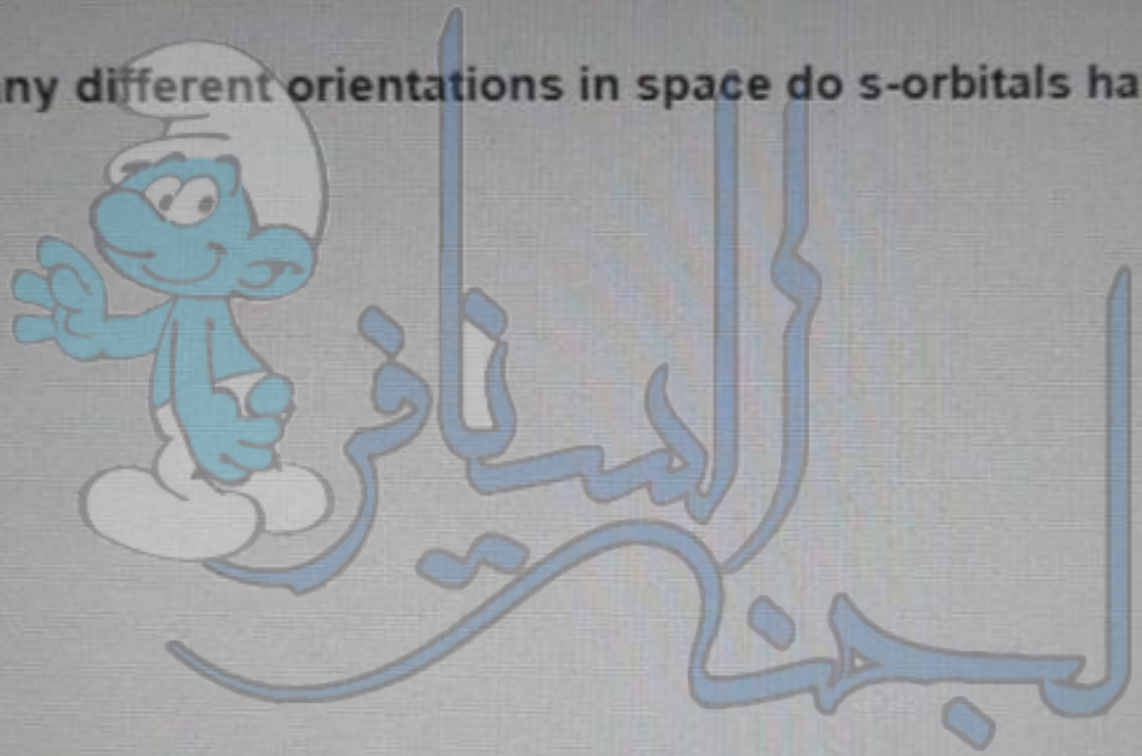

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