

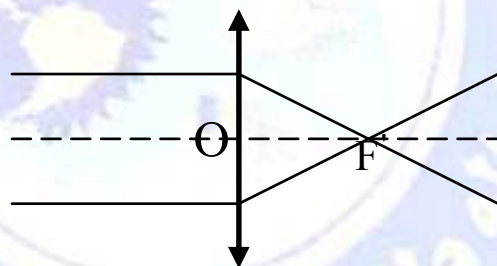
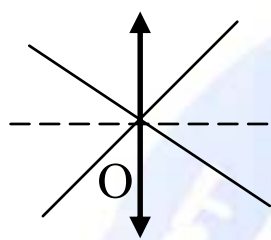
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- يرسم نقطة صورة الموافقة لنقطة جسم.
- استعمال علاقة التبدیل الموافقة لنموذج العدسات الرقيقة.





: -1

: -1-1

.O

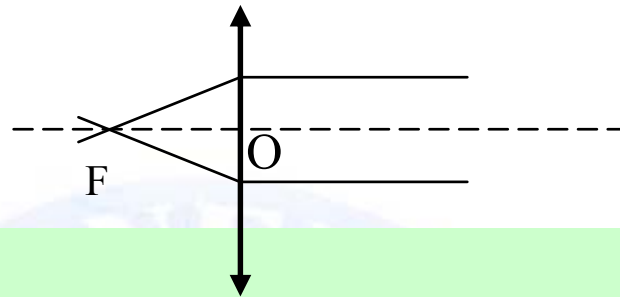
: -2-1

: -

:

(F') (F) : _____

(F)



:

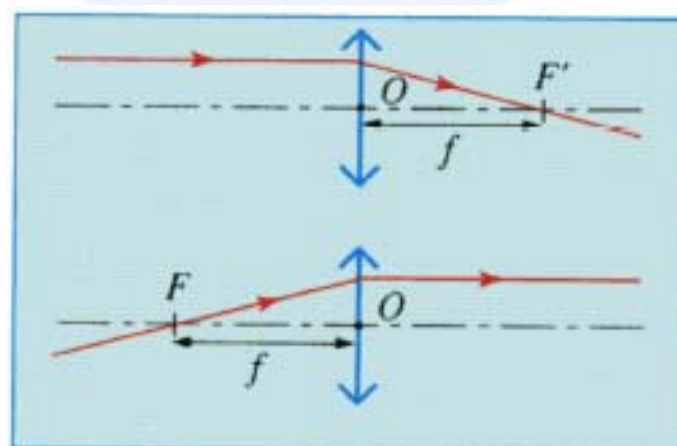
: _____

F

.F'

: _____ -3-1

$$f = OF = OF'$$



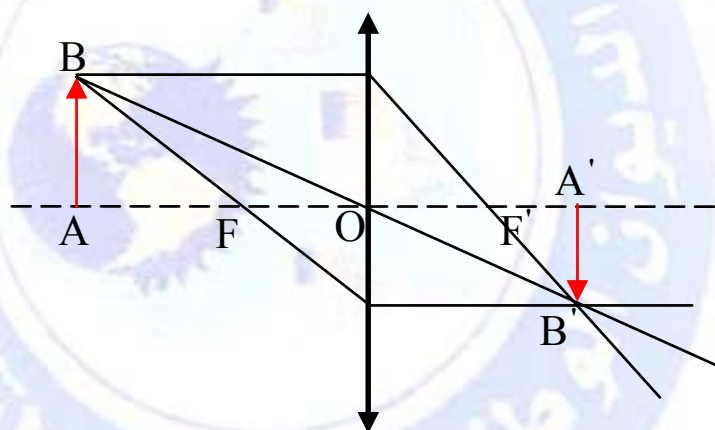
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-2

-1-2 _____ :

:

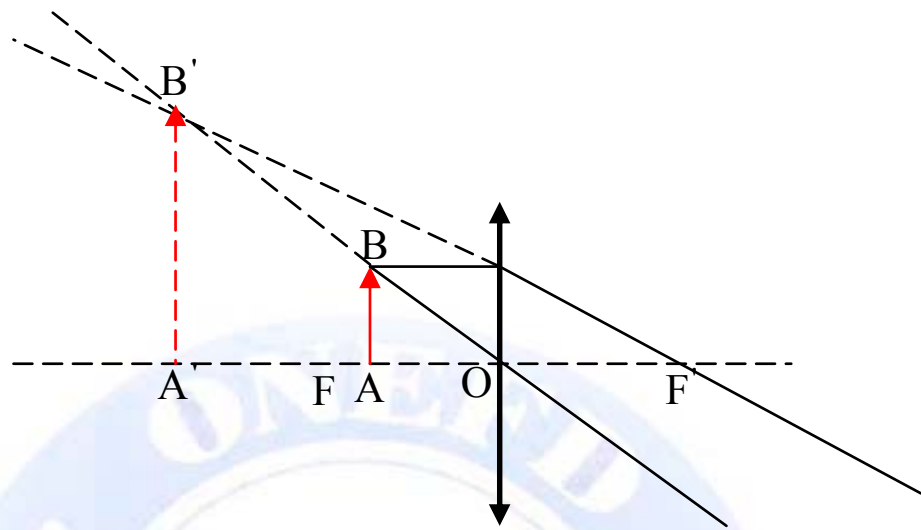
1 _____ :



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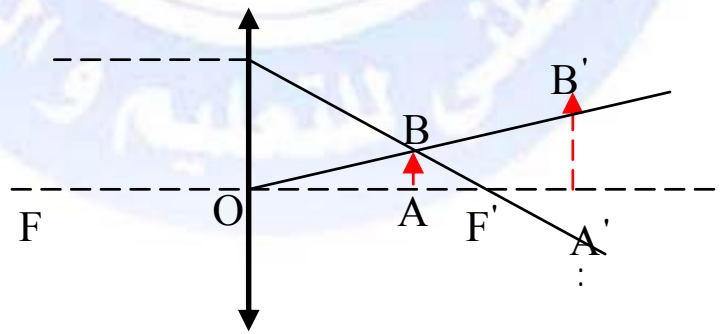
- ❖
- ❖
- ❖

2 _____ :



❖
❖
❖

3: _____

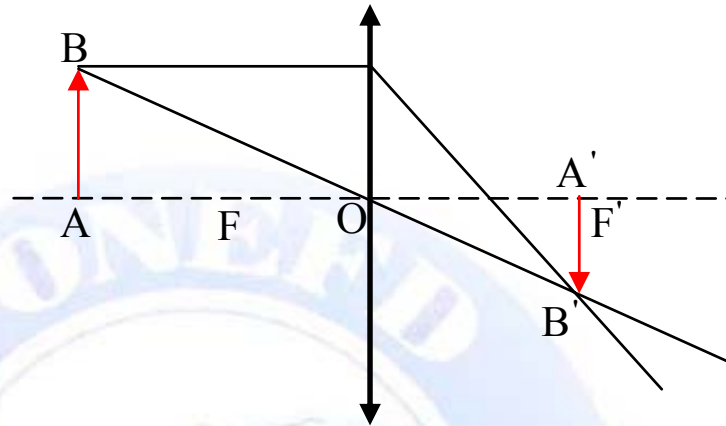


❖
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-2-2- _____ :

:

$$\left(\quad \right) \frac{1}{OA'} - \frac{1}{OA} = \frac{1}{f}$$



$$OF' = f > 0$$

$$OA < 0 \quad \bullet$$

$$OA' > 0 \quad \bullet$$

$$OA' < 0 \quad \bullet$$

-3-2 : _____

. AB A'B'

$$\gamma = \frac{A'B'}{AB} = \frac{OA'}{OA}$$

.() $\gamma > 0$

10 cm

50 cm

2 cm

:1

-1

-2

-3

: -1

$$\frac{1}{OA'} - \frac{1}{OA} = \frac{1}{f} \Rightarrow \frac{1}{OA'} = \frac{1}{f} + \frac{1}{OA} = \frac{f + OA}{f \times OA} \Rightarrow OA' = \frac{f \times OA}{f + OA}$$

$$OA' = \frac{-10 \times 50}{10 - 50} = 12.5 \text{ cm}$$

12,5 cm

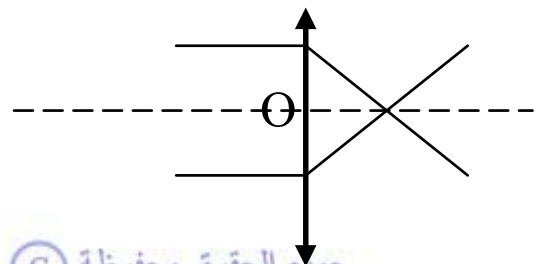
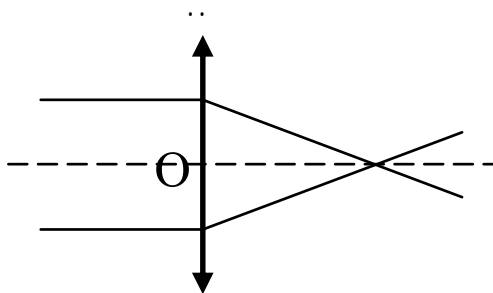
: $OA' > 0$

$$\gamma = \frac{A'B'}{AB} = \frac{OA'}{OA} \Rightarrow A'B' = \frac{OA'}{OA} \times AB = \frac{12.5}{-50} \times 2 = -0.5 \text{ cm}$$

0.5 cm

$\gamma < 0$

-3



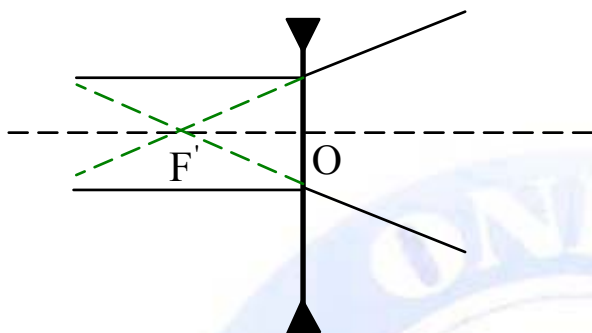
: C :

$$C = \frac{1}{f}$$

([m]) δ : [dioptrie] :

$$0 < C$$





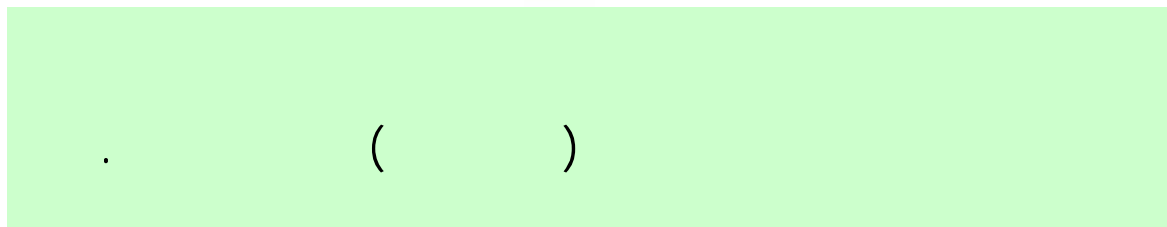
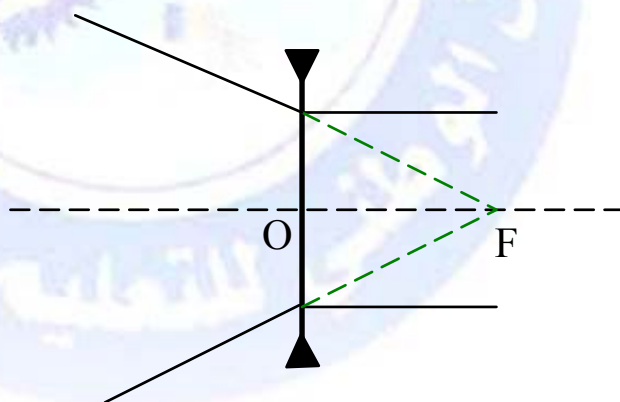
-1 () :

:

F'



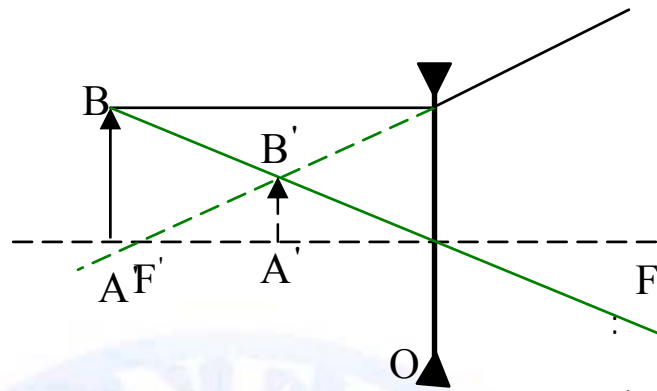
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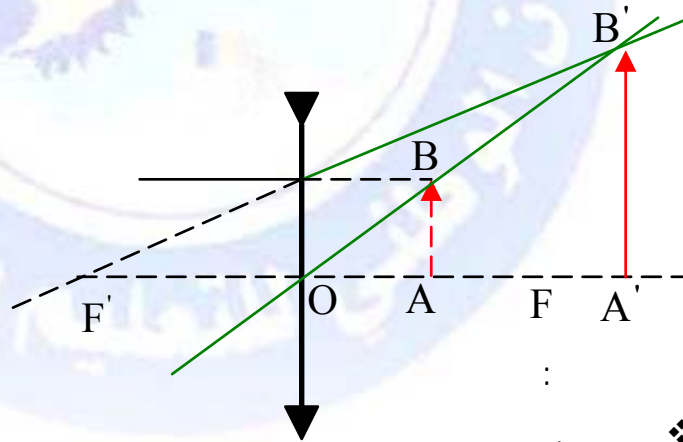
()

$$f < 0$$

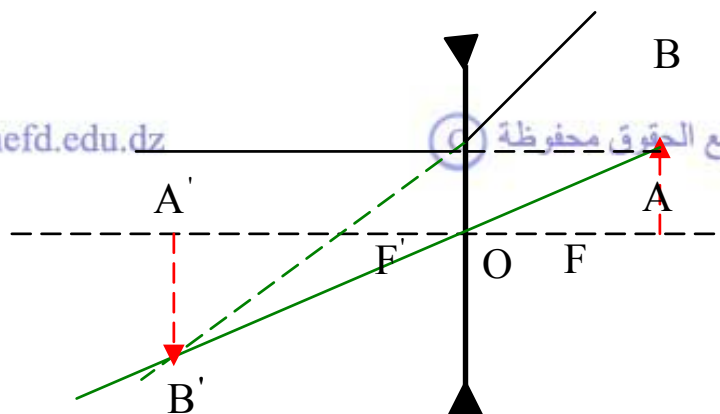
-3 :



:2 _____



:3 _____

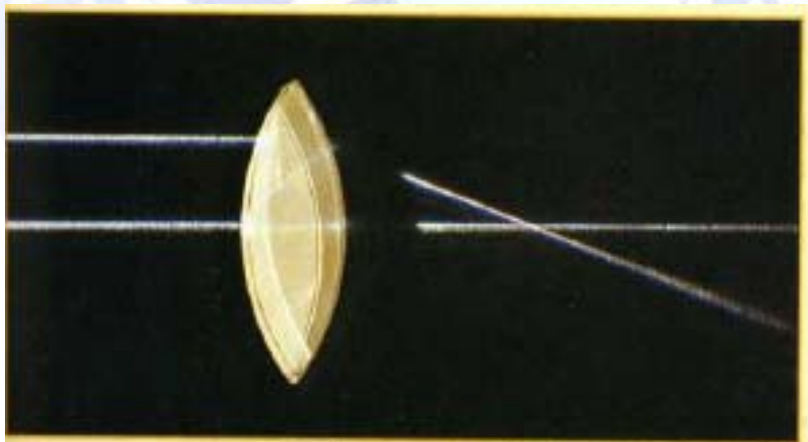




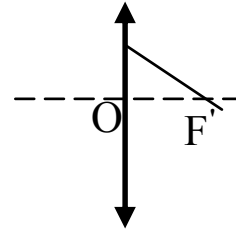
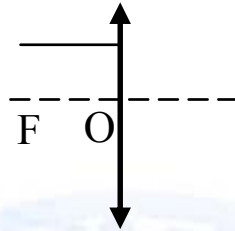
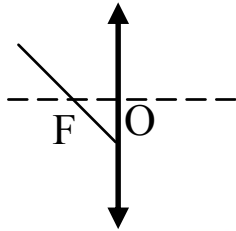
1: _____

.dioptries

2: _____



:3 _____



:4 _____

.5,0 dioptrie

:5 _____

2 cm

AB

.12 cm

30 cm

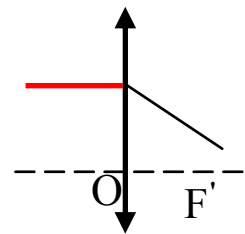
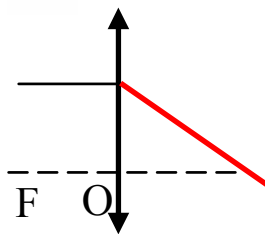
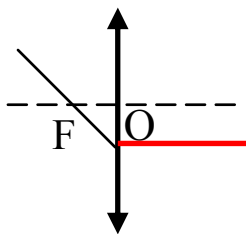
-1

:1 _____

:2 _____

:3 _____

() :



:4 _____

:

<http://www.onefd.edu.dz> $\Leftarrow f = \frac{1}{C} \Leftarrow C = \frac{1}{f}$ جميع الحقوق محفوظة

$$f = \frac{1}{5} = 0,2\text{m}$$

:5

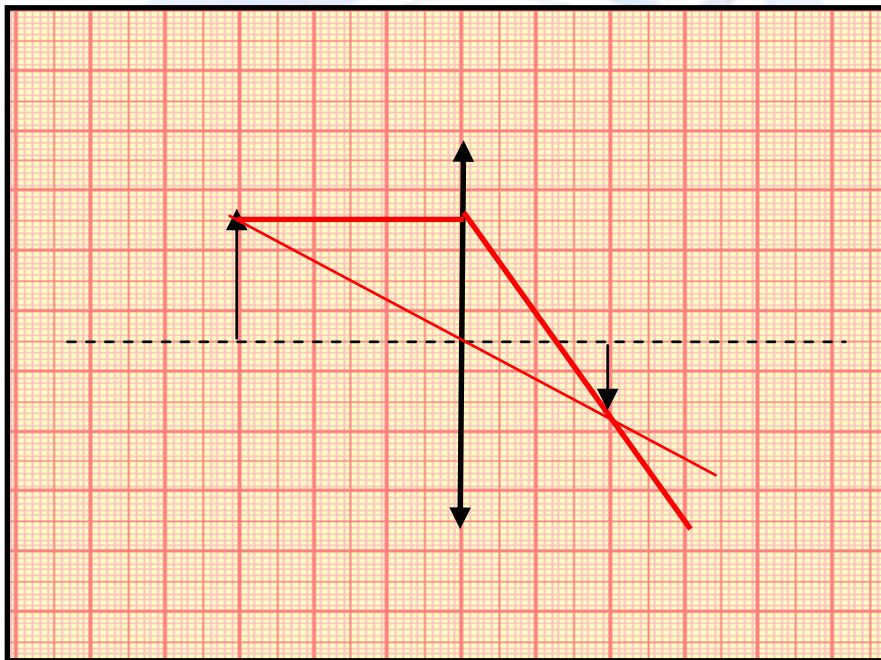
: -1

: -

:

1 cm → 1 cm :

10 cm → 1cm :



: -

$$\frac{1}{OA'} - \frac{1}{OA} = \frac{1}{f} \Rightarrow \frac{1}{OA'} = \frac{1}{f} + \frac{1}{OA} = \frac{f + OA}{f \times OA} \Rightarrow OA' = \frac{f \times OA}{f + OA}$$

$$OA < 0$$

$$OA' = \frac{12 \times (-30)}{12 + (-30)} = 20\text{cm}$$

$$OA' = 20\text{cm}$$

_____ :

$$\gamma = \frac{A'B'}{AB} = \frac{OA'}{OA} \Rightarrow A'B' = \frac{OA'}{OA} \times AB = \frac{20}{-30} \times 2 = -1,33\text{cm}$$

$A'B' < 0$



:6

$f = 5 \text{ cm}$

3 cm

AB

A

AB

A'B'

/1

/2

/3

/4

/5

/6

$OA' = - 7,5 \text{ cm}$

$\gamma = + 2,5$

:7_____

:

:

-

20 cm ; ☐ 20 m ; ☐ 5 cm ☐

-

:

☐ 10 cm, ☐ cm, 5 c ☐ 0, ☐ ☐

-

☐ 0 ; ☐ ; 1 ; ☐ 2 ; ☐ -2 ☐

:_____

5 cm -

5 -

cm

-1 -

:8_____

/1

/2

/3

_____ :

$$OA' = 24 \text{ cm} \quad /1$$

. /2

$$\gamma = -2 \quad , \quad A'B' = -8 \text{ cm} \quad /3$$

