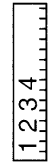


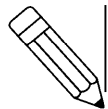
66

CE-CM

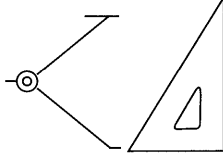
Matériel nécessaire :



Une règle



Un crayon de papier



Un compas

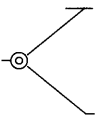


Une gomme

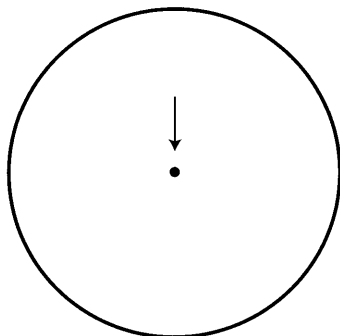
Une équerre

Yin Yong

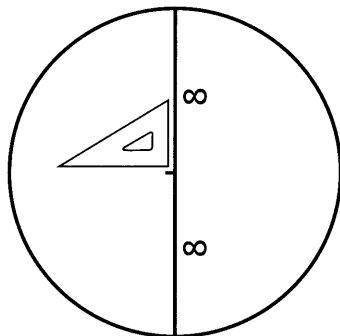
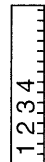
1



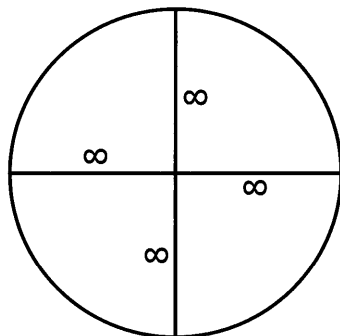
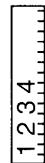
$r = 8 \text{ cm}$



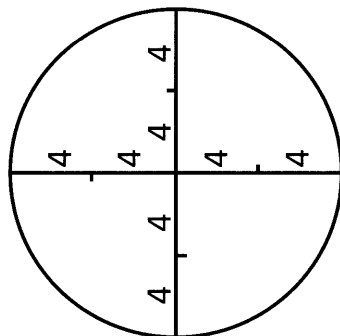
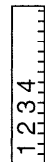
2



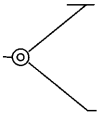
3



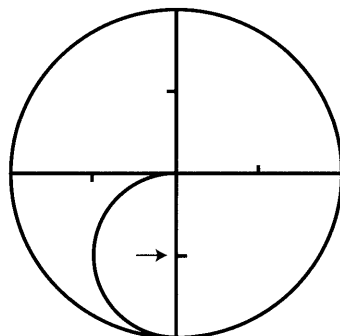
4



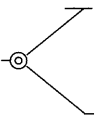
5



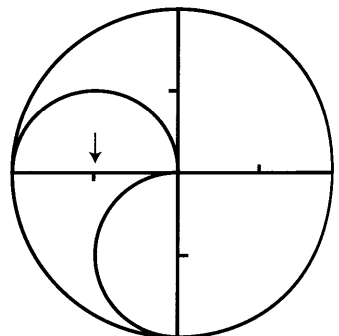
$r = 4 \text{ cm}$



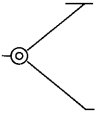
6



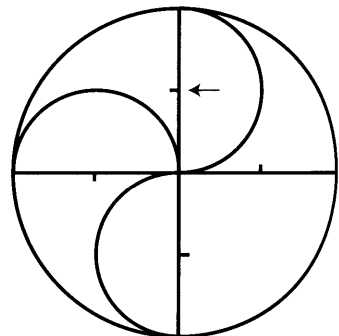
$r = 4 \text{ cm}$



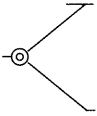
7



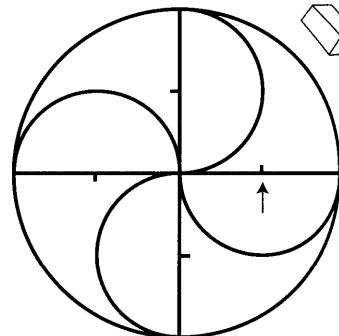
$r = 4 \text{ cm}$



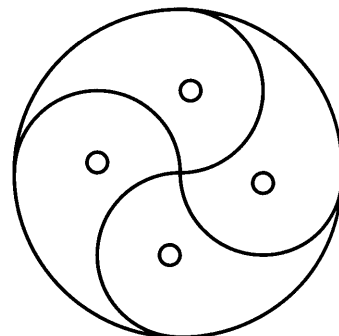
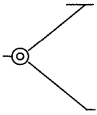
8



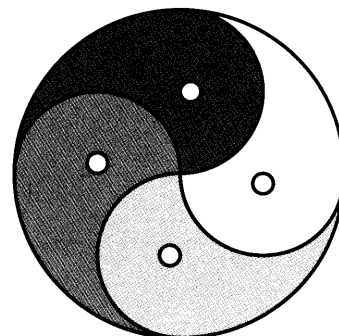
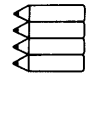
$r = 4 \text{ cm}$



9



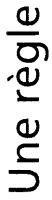
10



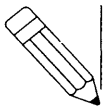
6

CP-CM1

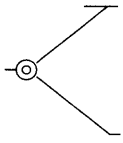
Matériel nécessaire :



Une règle



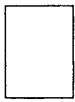
Un crayon de papier



Un compas



Une gomme

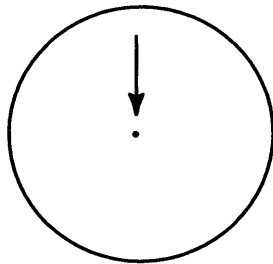


Une feuille A4

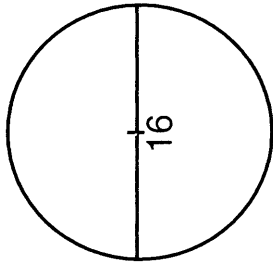
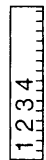
1



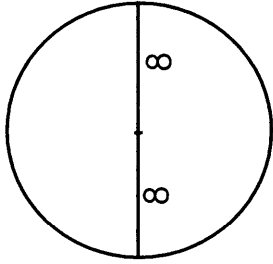
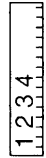
$r = 8 \text{ cm}$



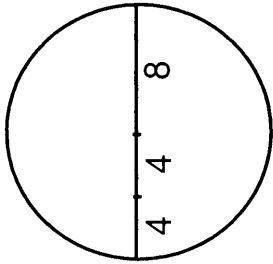
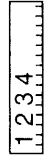
2



3



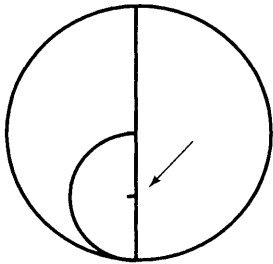
4



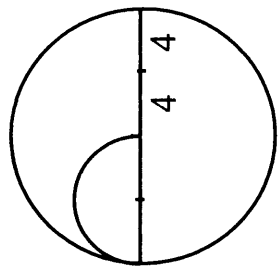
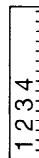
5



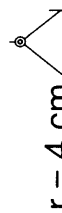
$r = 4 \text{ cm}$



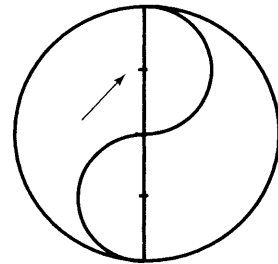
6



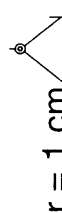
7



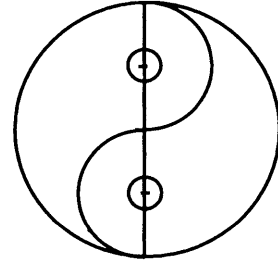
$r = 4 \text{ cm}$



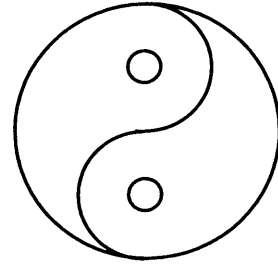
8



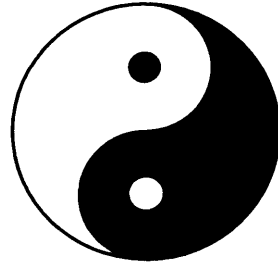
$r = 1 \text{ cm}$



9



10

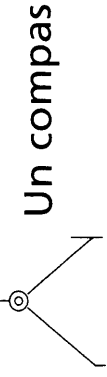


3

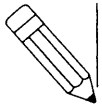
La tripoutre (R. Penrose)

CE2-CM

Matériel nécessaire :



Un compas



Un crayon de papier



Une règle



Des crayons de couleur



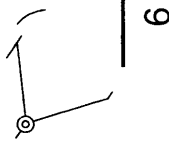
Une feuille A4

1



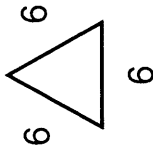
$r = 6 \text{ cm}$

2



6

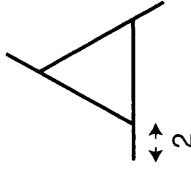
3



6

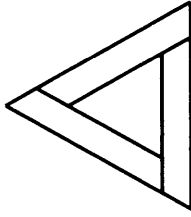
6

4

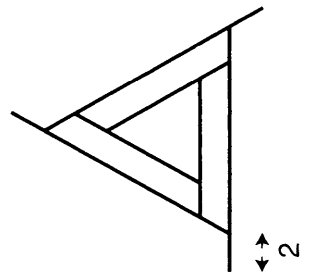


2

5

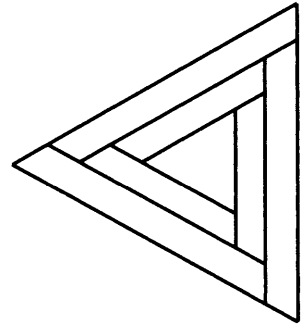


6

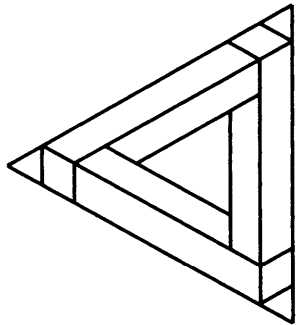


2

7



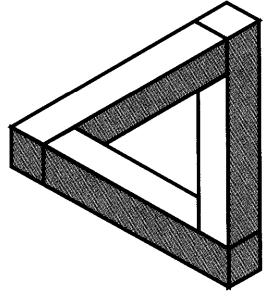
8



9



10



La cible Op'art (2)

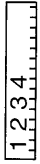
Matériel nécessaire :



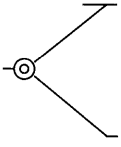
Une feuille A4



Des crayons
de couleur



Une règle

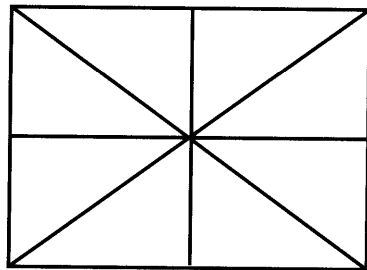
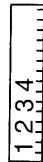


Un compas



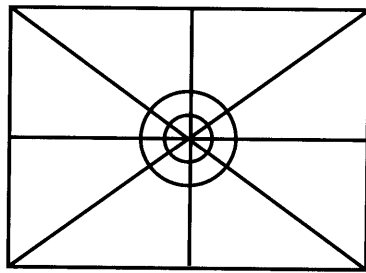
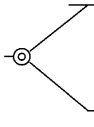
Une gomme

1



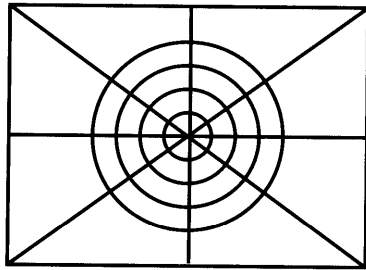
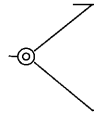
2

$r1 = 2 \text{ cm}$
 $r2 = 4 \text{ cm}$



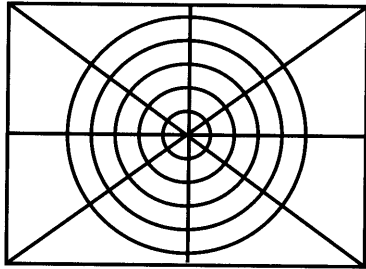
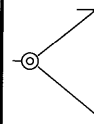
3

$r3 = 6 \text{ cm}$
 $r4 = 8 \text{ cm}$

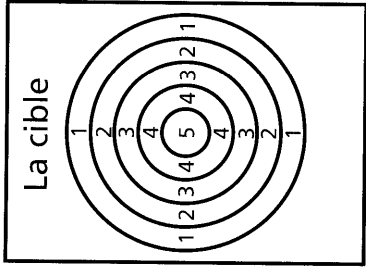
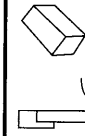


4

$r5 = 10 \text{ cm}$

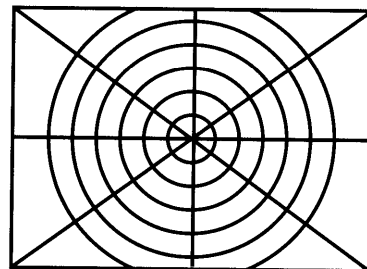
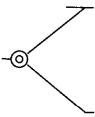


5



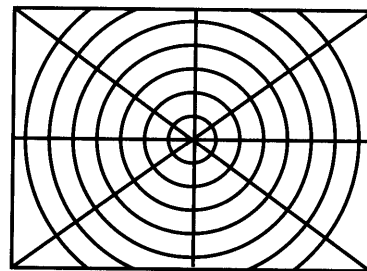
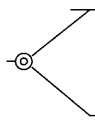
6

$r6 = 12 \text{ cm}$



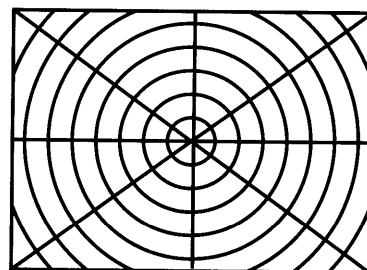
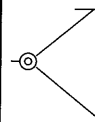
7

$r7 = 14 \text{ cm}$



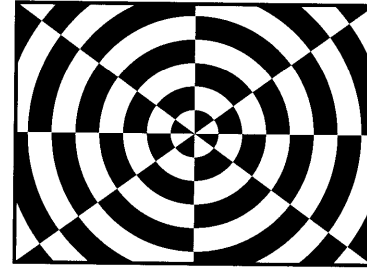
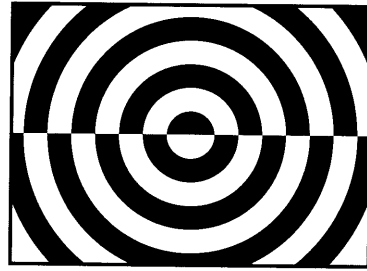
8

$r8 = 16 \text{ cm}$



9

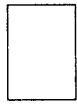
Op'art 2



Matériel nécessaire :



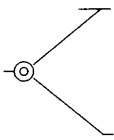
Un tube de colle



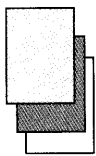
Une feuille A4



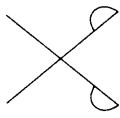
Une équerre



Un compas



Du papier de couleur



Une paire de ciseaux

1



$r = 2 \text{ cm}$

2

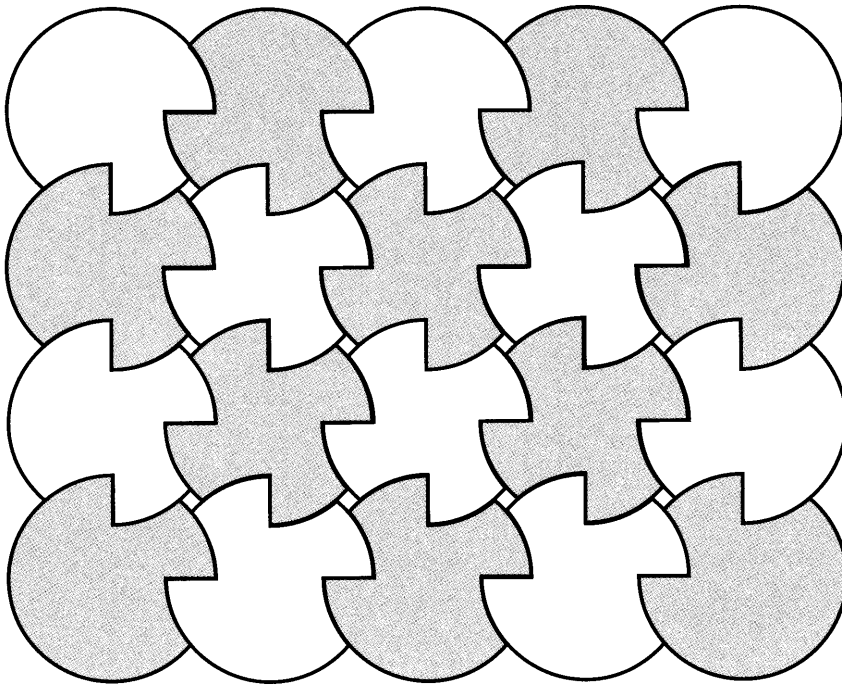


Faire une encoche de 0,5 cm environ

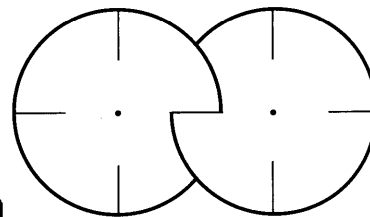
3



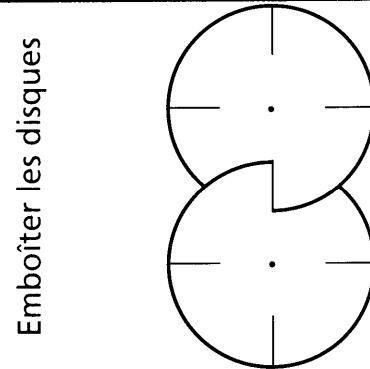
7



4

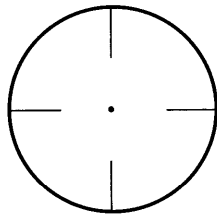
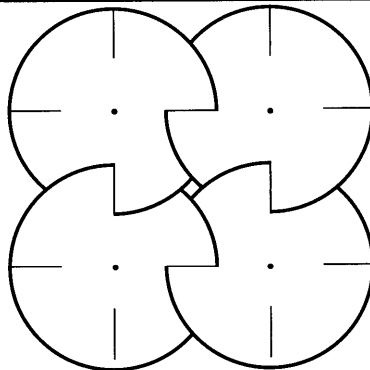


5



Emboîter les disques

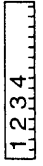
6



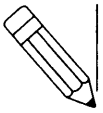
7

CP-CE1

Matériel nécessaire :



Une règle



Un crayon de papier



Une gomme



Des crayons de couleur



Une feuille A4

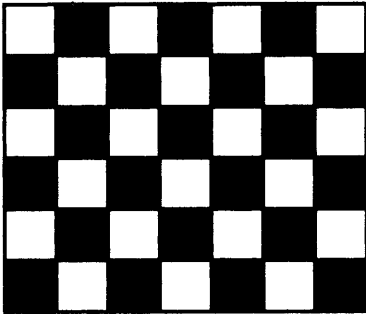
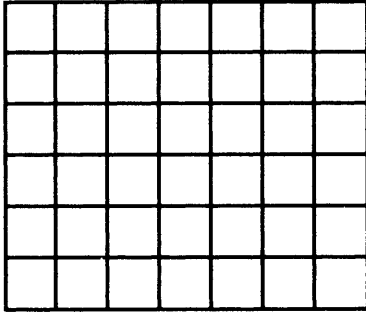
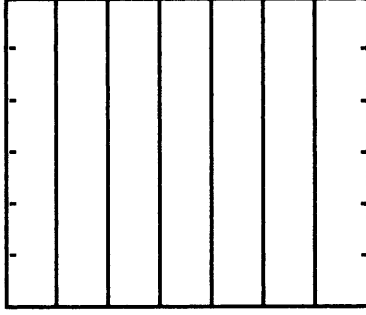
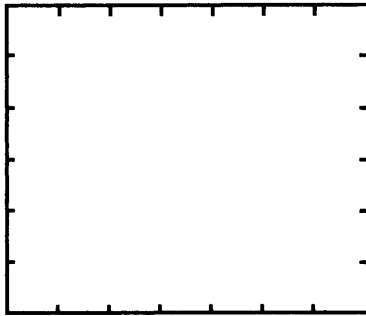
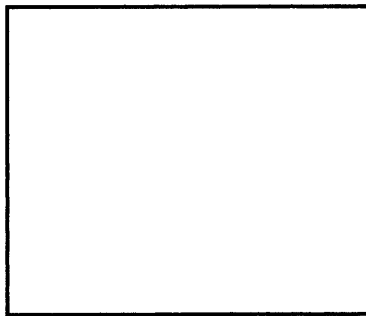
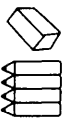
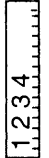
1

2

3

4

5



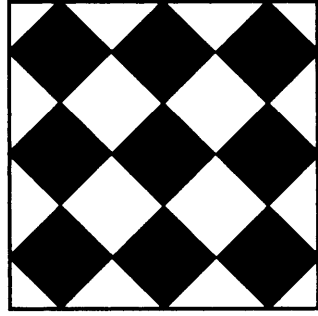
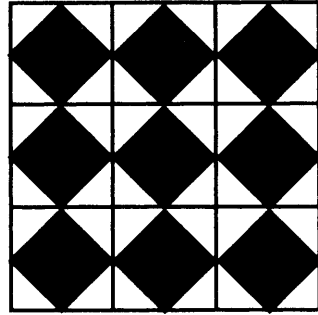
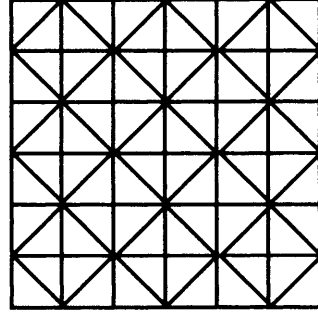
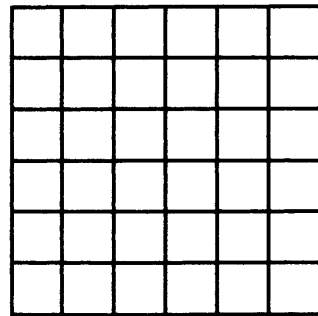
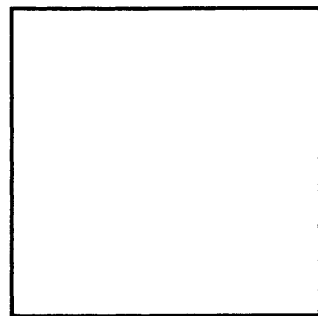
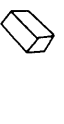
1

2

3

4

5

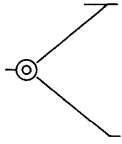


12

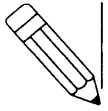
CP-CE

La locomotive

Matériel nécessaire :



Un compas



Un crayon de papier



Une gomme

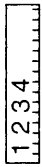


Des crayons de couleur

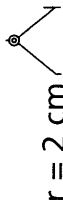


Une équerre

1

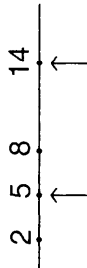


2



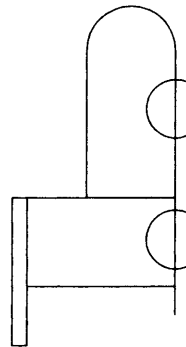
$r = 2 \text{ cm}$

Tracer un segment de 18 cm.
Faire une marque à 2, 5, 8 et 14 cm.
Tracer un cercle ($r = 2 \text{ cm}$) à 5 et 14 cm

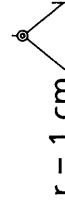


6

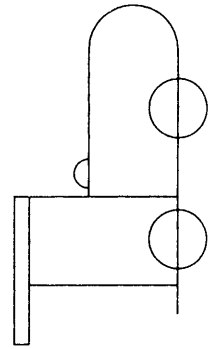
Tracer un rectangle de 1 cm x 10 cm



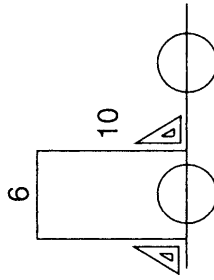
7



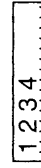
$r = 1 \text{ cm}$



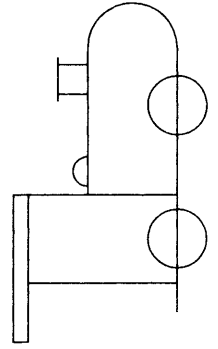
3



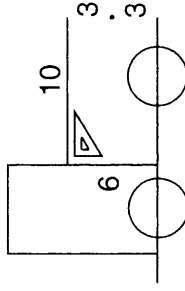
8



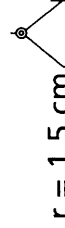
Tracer un carré de 2 cm x 2 cm



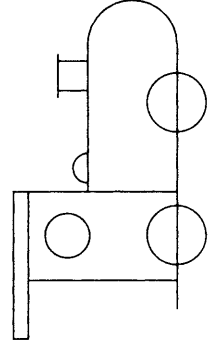
4



9



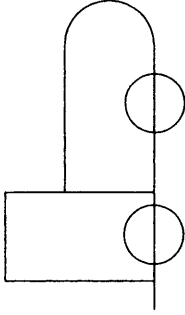
$r = 1,5 \text{ cm}$



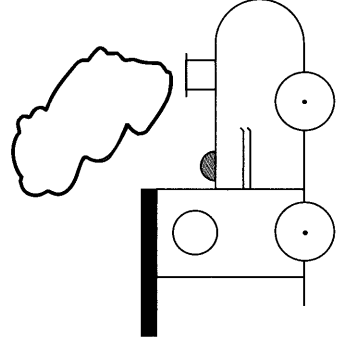
5



$r = 3 \text{ cm}$



10

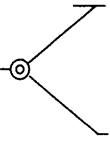


5

CE-CM

Matériel nécessaire :

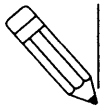
Un compas



Une gomme



Un crayon de papier



Une feuille A4



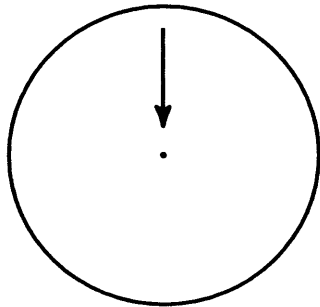
Des crayons de couleur



La rosace (1)

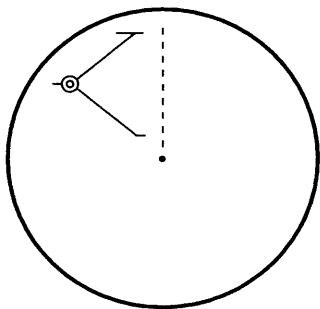
1

$r = 8 \text{ cm}$



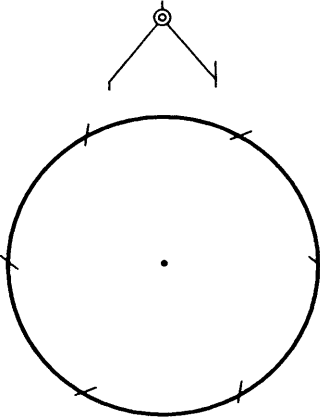
2

$r = 8 \text{ cm}$



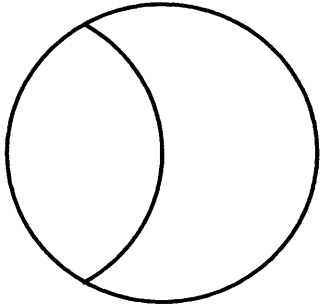
3

Reporter 6 fois le rayon



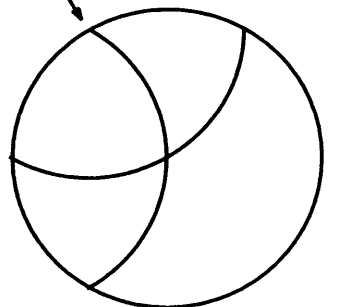
4

$r = 8 \text{ cm}$



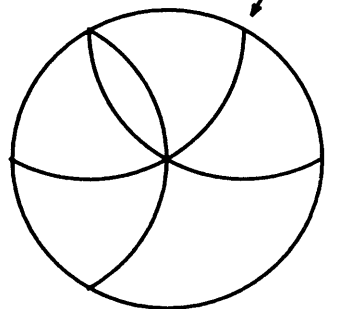
5

$r = 8 \text{ cm}$



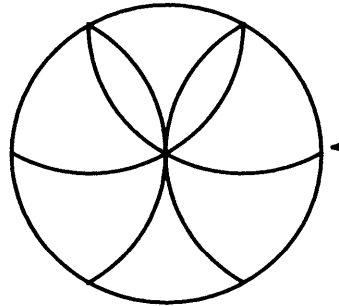
6

$r = 8 \text{ cm}$



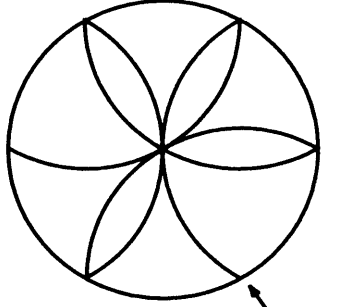
7

$r = 8 \text{ cm}$



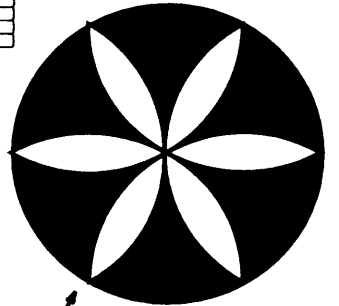
8

$r = 8 \text{ cm}$



9

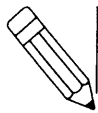
$r = 8 \text{ cm}$



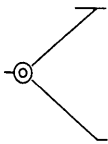
19

CE-CM

Matériel nécessaire :



Un crayon de papier



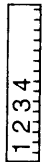
Un compas



Une gomme



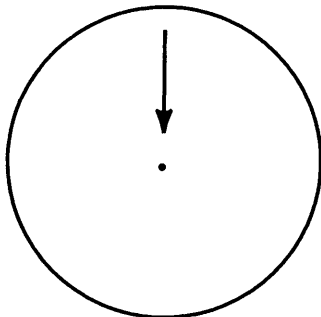
Des crayons de couleur



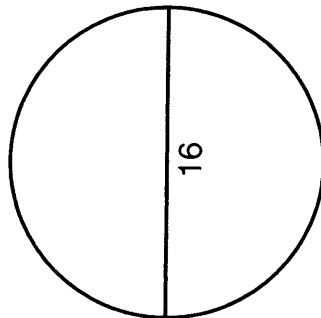
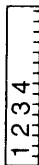
Une règle

1

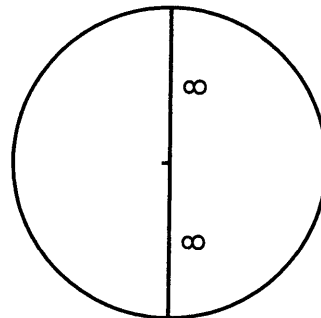
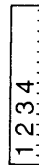
$r = 8 \text{ cm}$



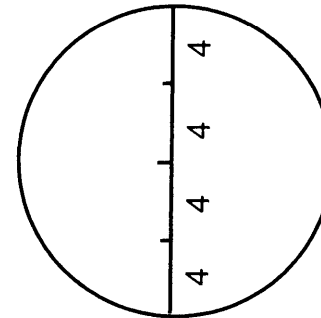
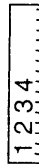
2



3

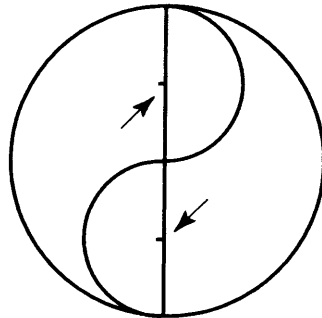


4

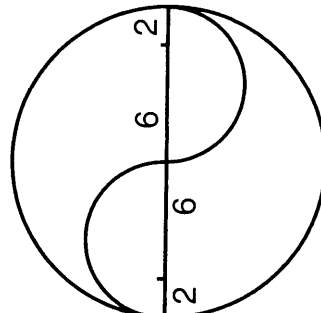
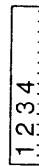


5

$r = 4 \text{ cm}$

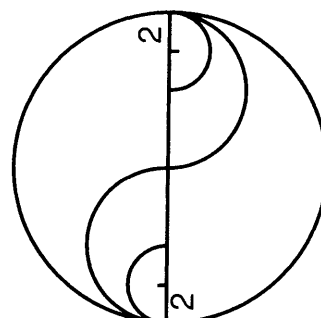


6

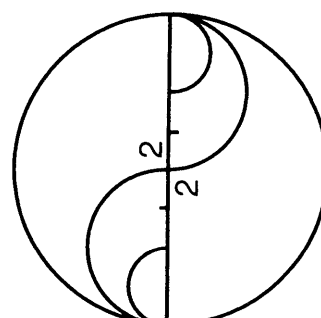
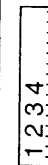


7

$r = 2 \text{ cm}$

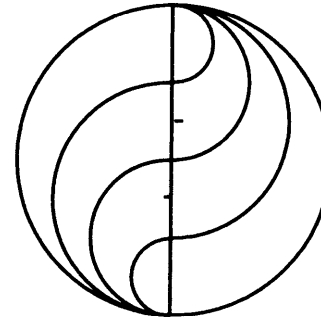


8

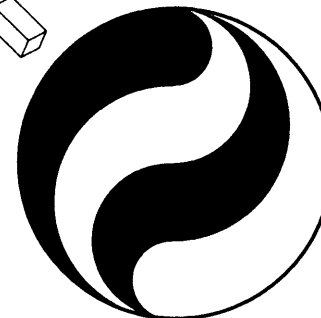
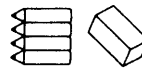


9

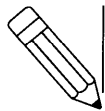
$r = 6 \text{ cm}$



10



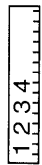
Matériel nécessaire :



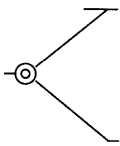
Un crayon de papier



Des crayons de couleur



Une règle



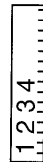
Un compas



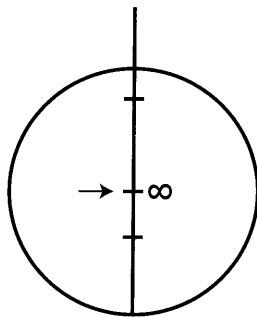
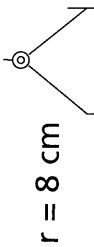
Une gomme

La coccinelle

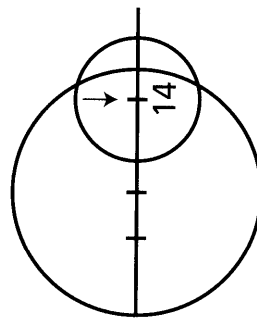
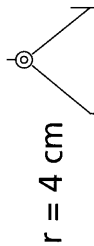
1



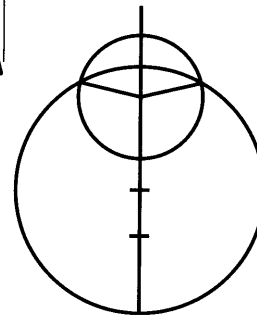
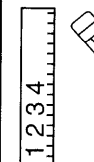
2



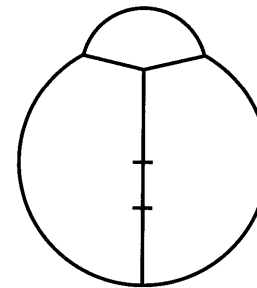
3



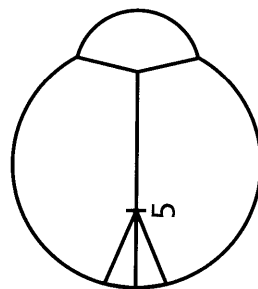
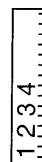
4



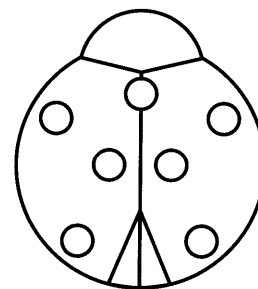
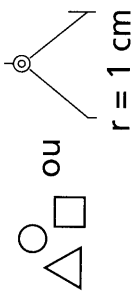
5



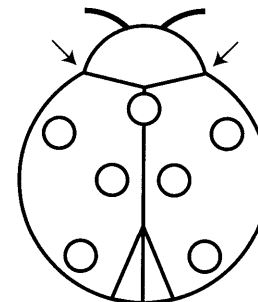
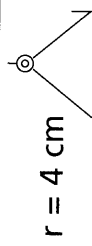
6



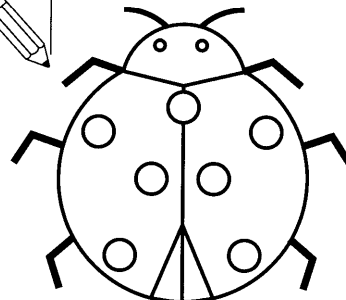
7



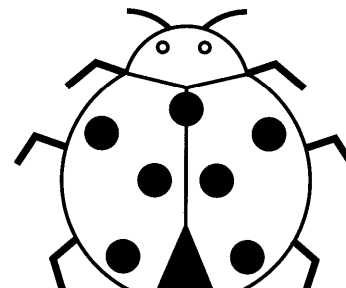
8



9



10

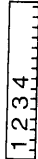


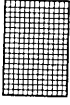



Pour les petits rayons, les gabarits (blocs logiques, pièces de monnaie...) remplacent avantageusement le compas.

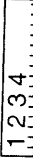

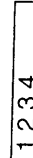

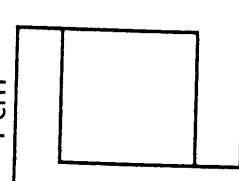


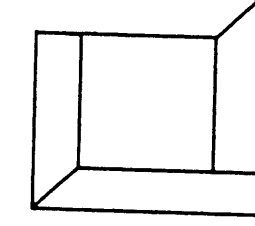
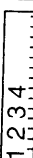
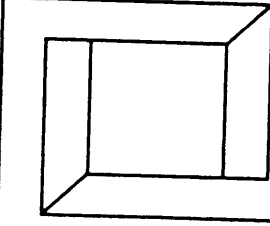


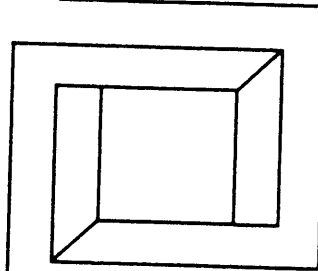
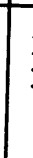

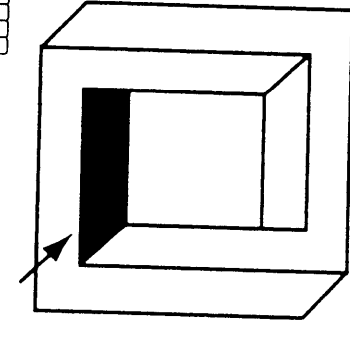

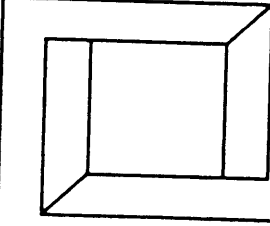


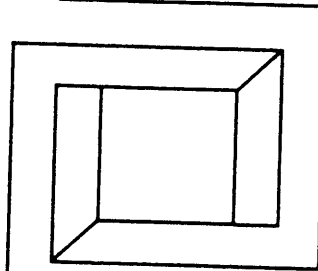
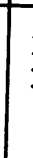

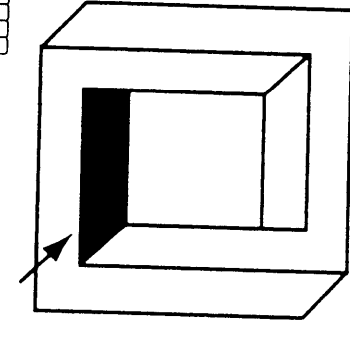
35

CE2-CM

Matériel nécessaire :

-  Une règle
-  Des crayons de couleur
-  Un crayon de papier
-  Une feuille quadrillée
-  ou une feuille A4

Avec une feuille à petits carreaux, il suffit de remplacer les cm par autant de carreaux.

| | | | | | | | | | | |
|----------|---|---|---|----------|--|---|---|-----------|---|---|
| 1 |  |  3 cm |  | 2 |  |  4 cm |  | 3 |  |  6 cm |
| 6 |  |  6 cm |  | 7 |  |  6 |  | 8 |  |  6 cm |
| |  |  6 cm |  | 9 |  |  6 cm |  | 10 |  |  6 cm |

Alternativement, on voit deux carrés.