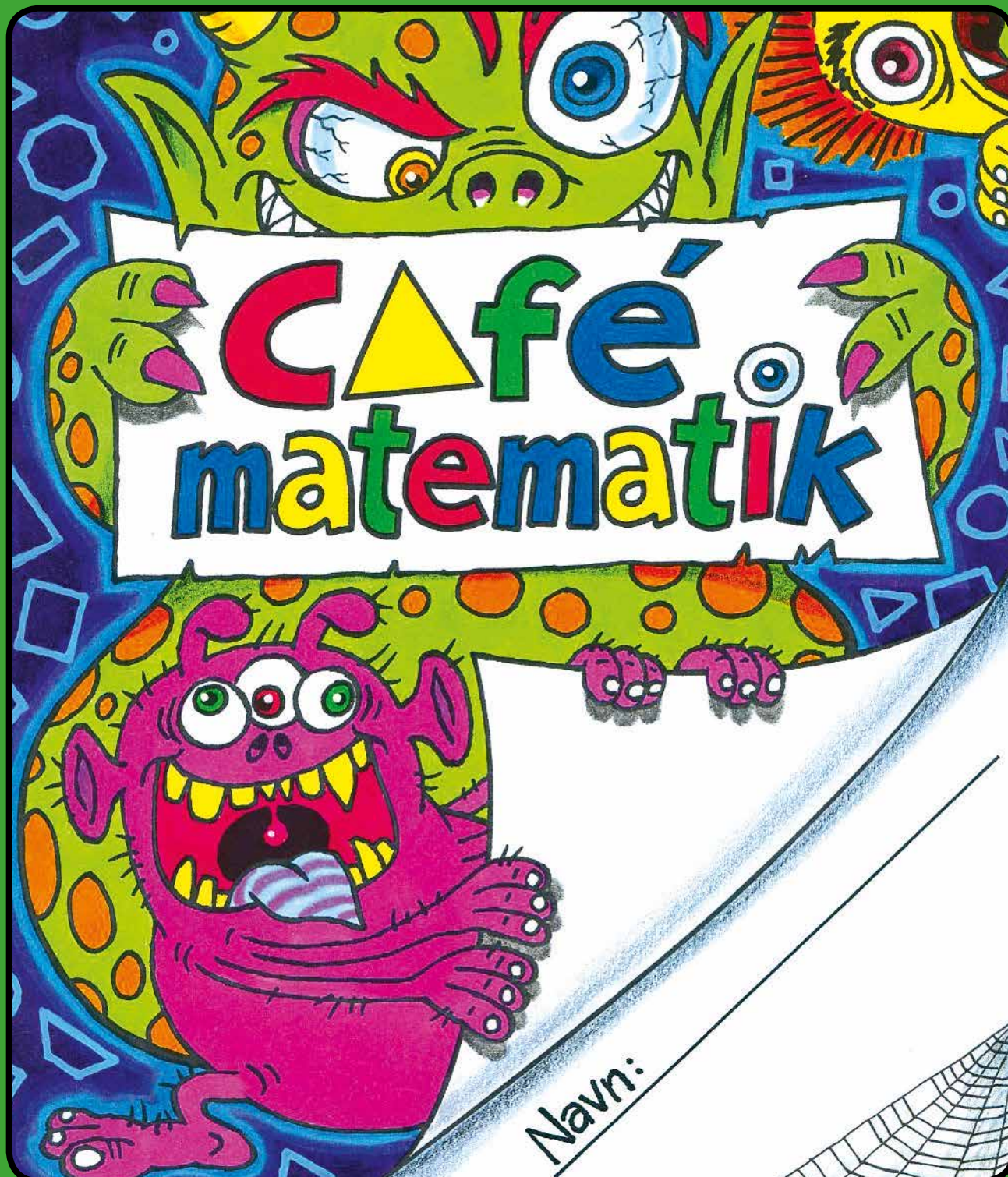


Former og figurer

Geometri 1



Af Hanne Vilhelmsen

MELONI

Former og figurer – Geometri 1

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5000 Odense C

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Hvad hedder figurerne?



FEMKANT

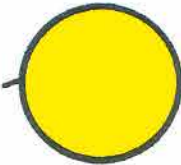
TREKANT

CIRKEL

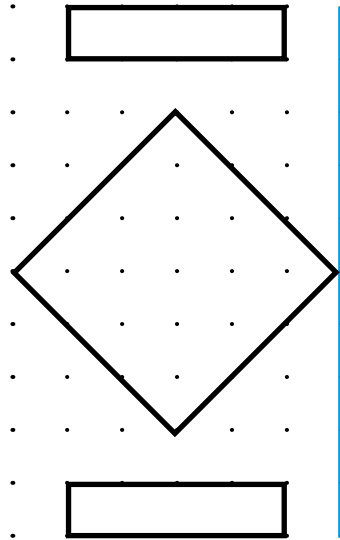
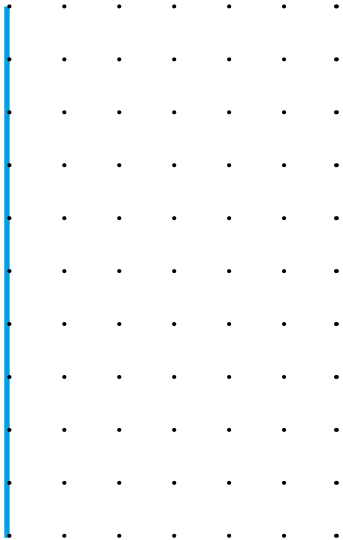
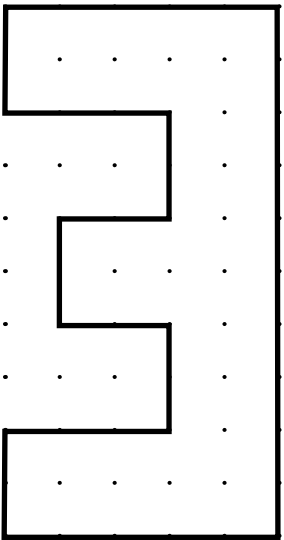
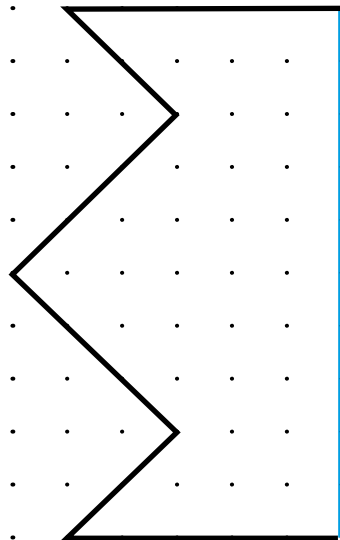
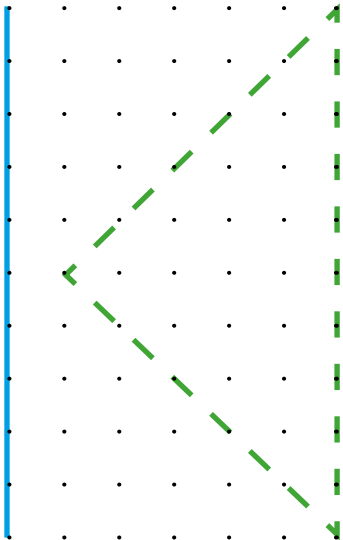
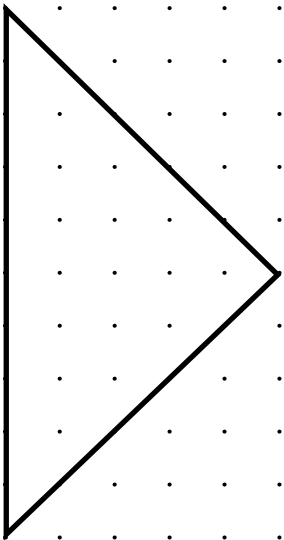
OTTEKANT

FIRKANT

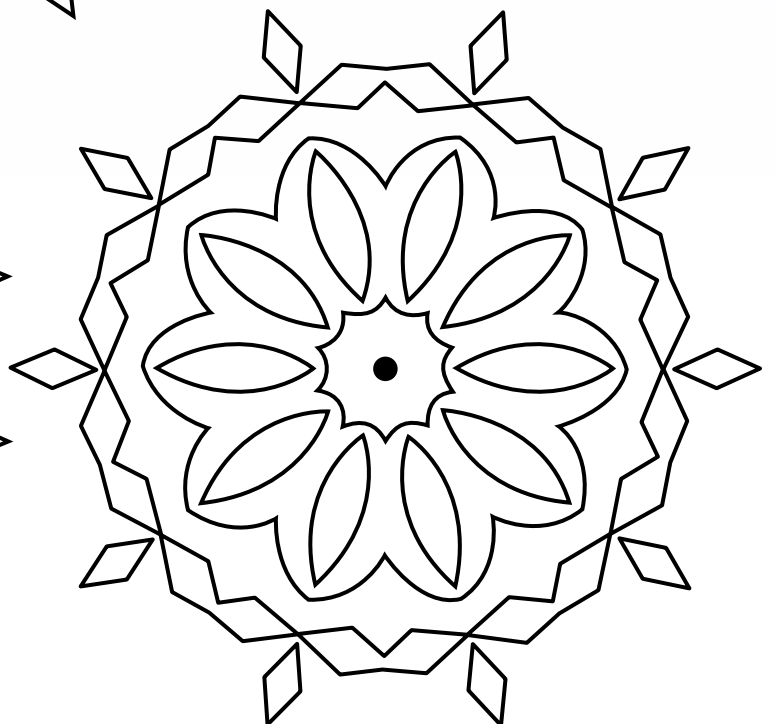
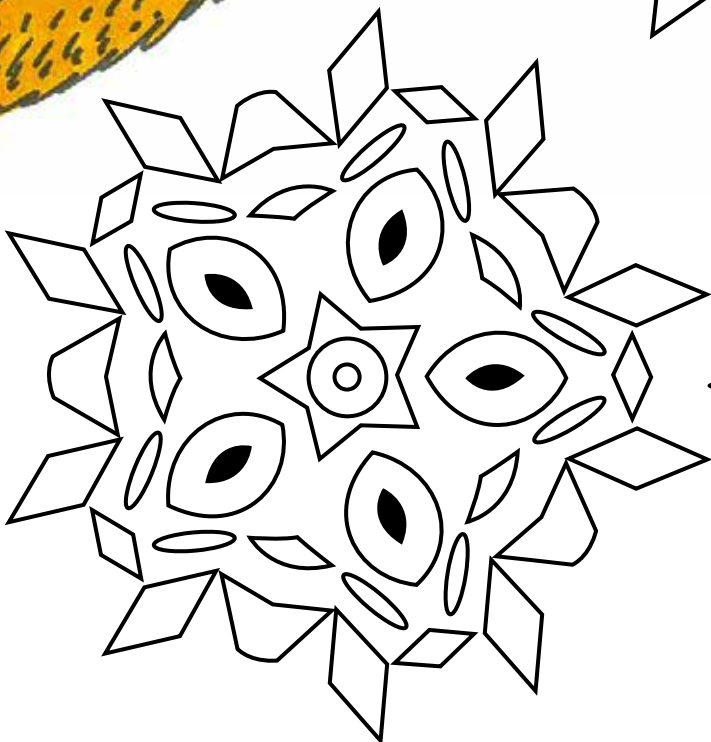
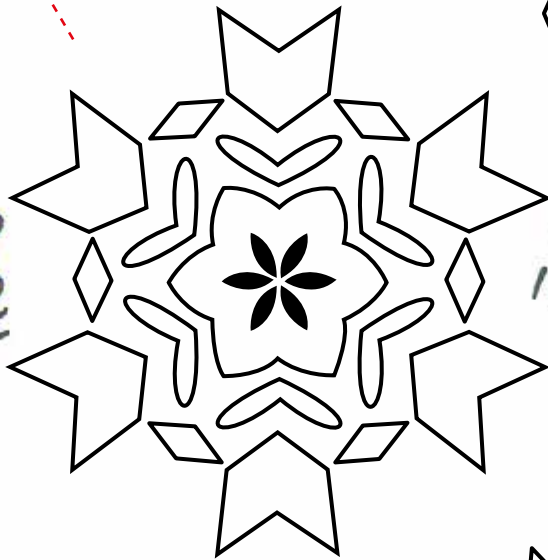
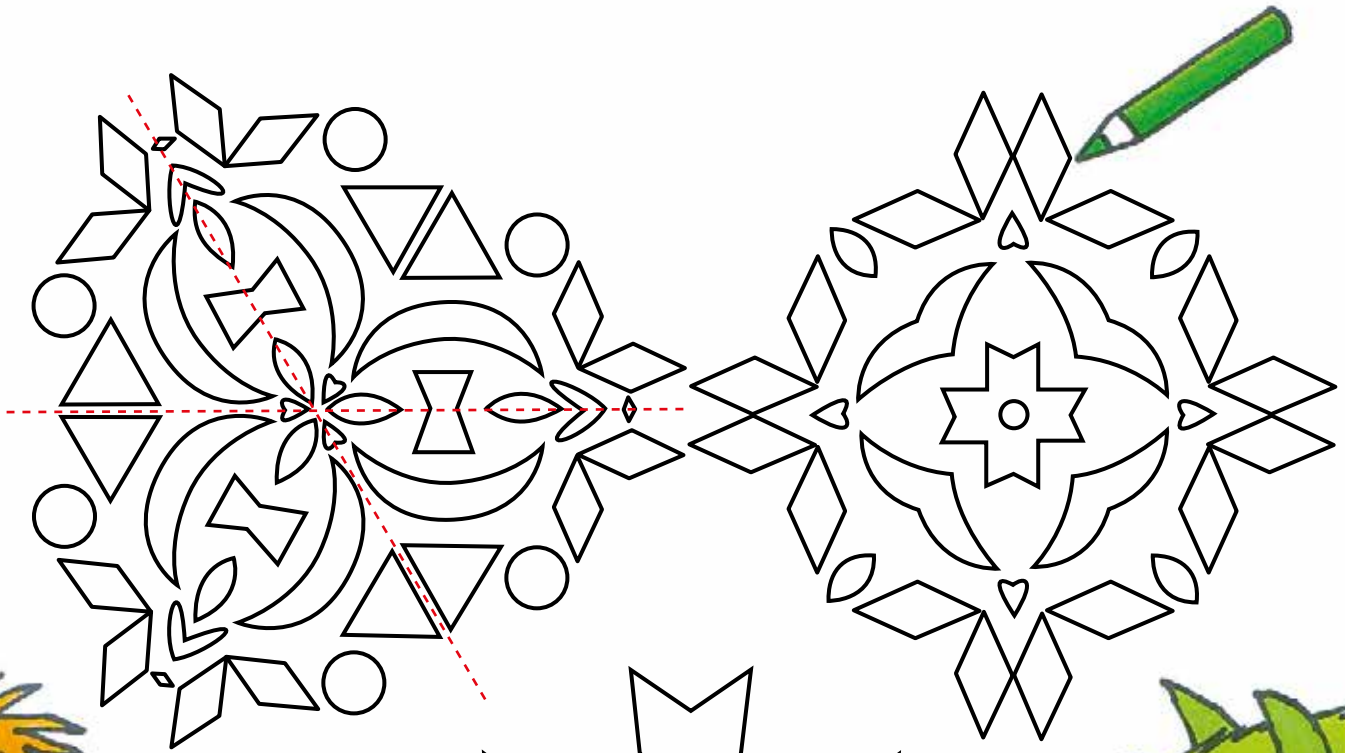
SEKSKANT



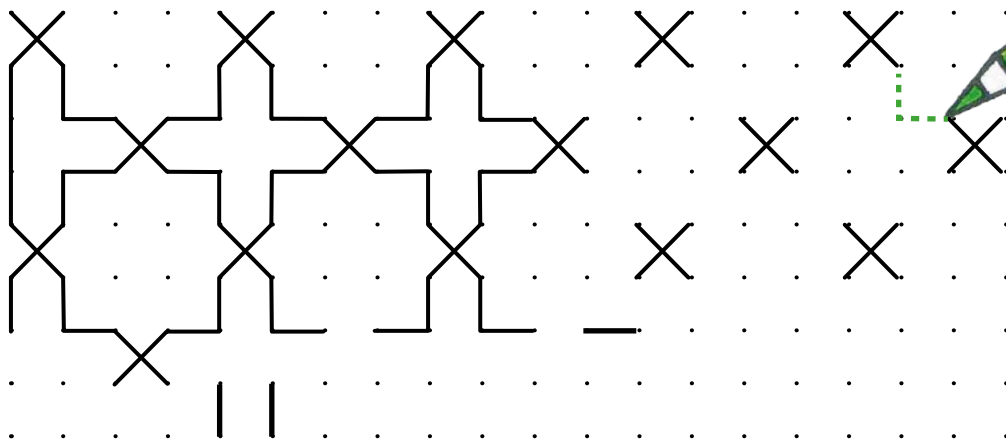
Spejl figurerne og farv dem flot



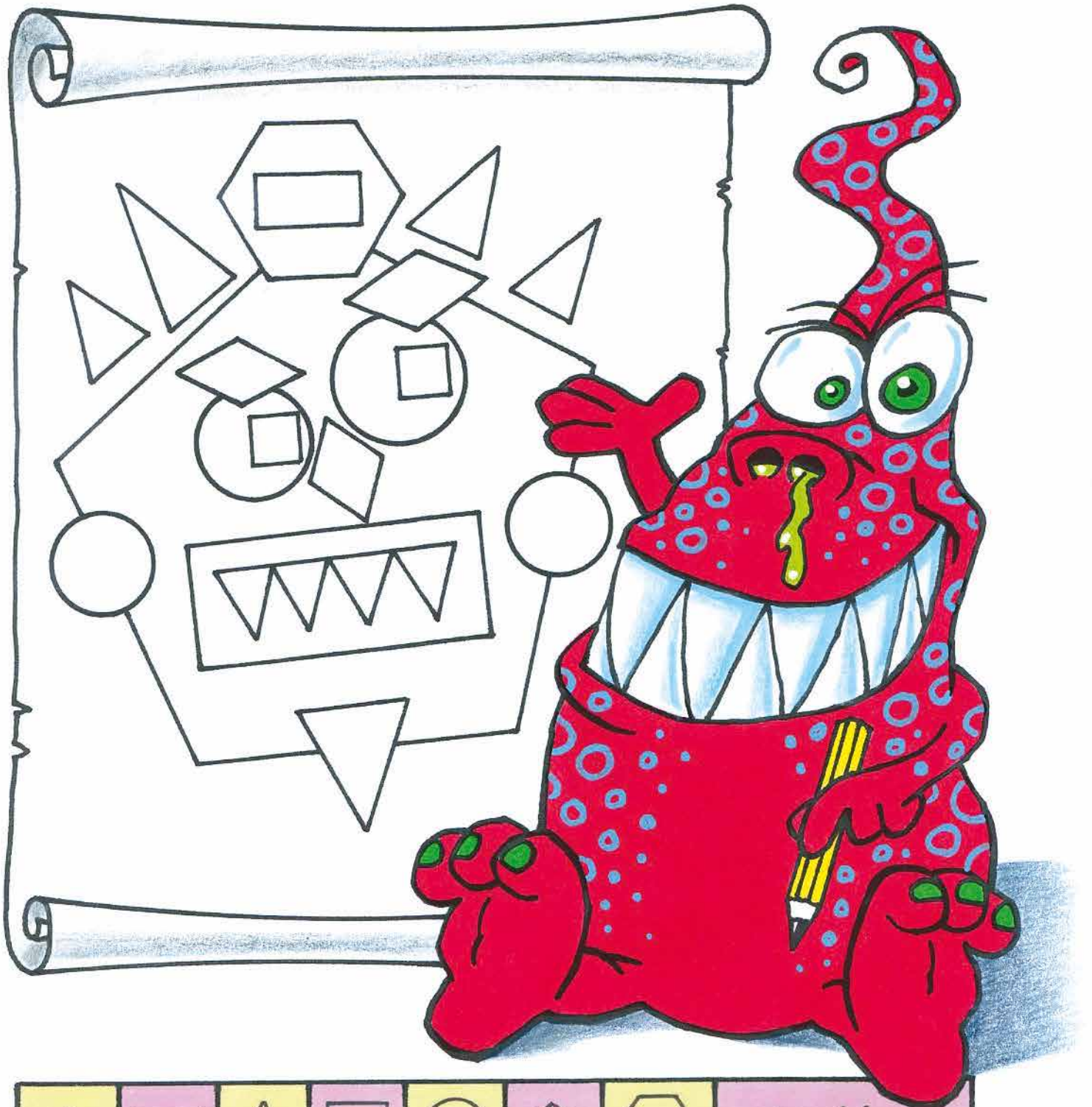
Tegn symmetri-akser

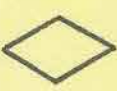
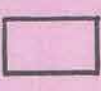







Tegn mønsteret færdigt og farv det flot



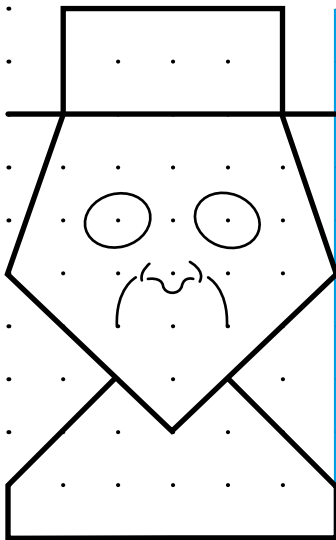
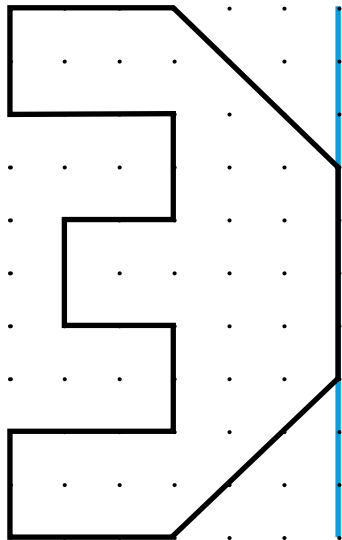
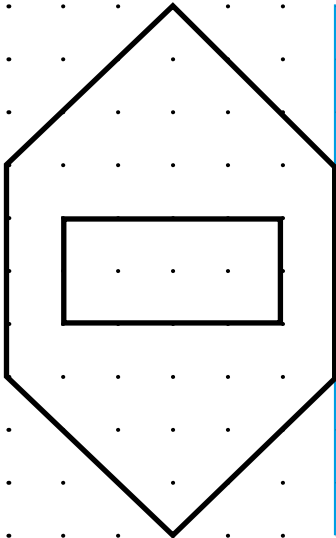
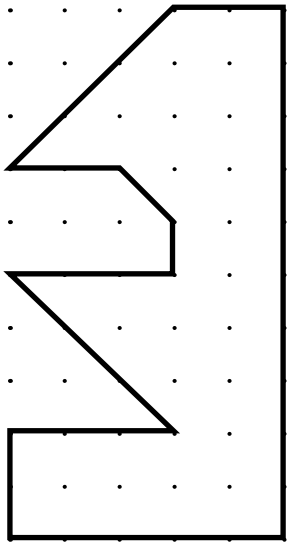
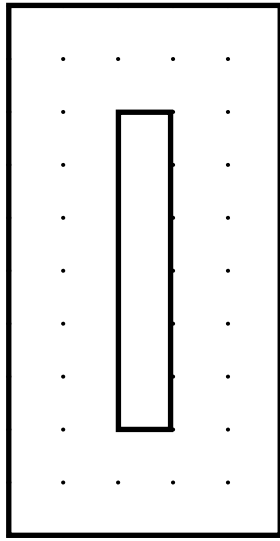
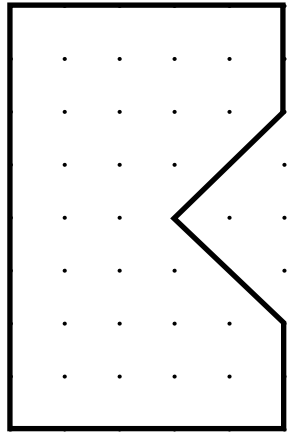
Find de 22 geometriske figurer



							I alt:
							=====



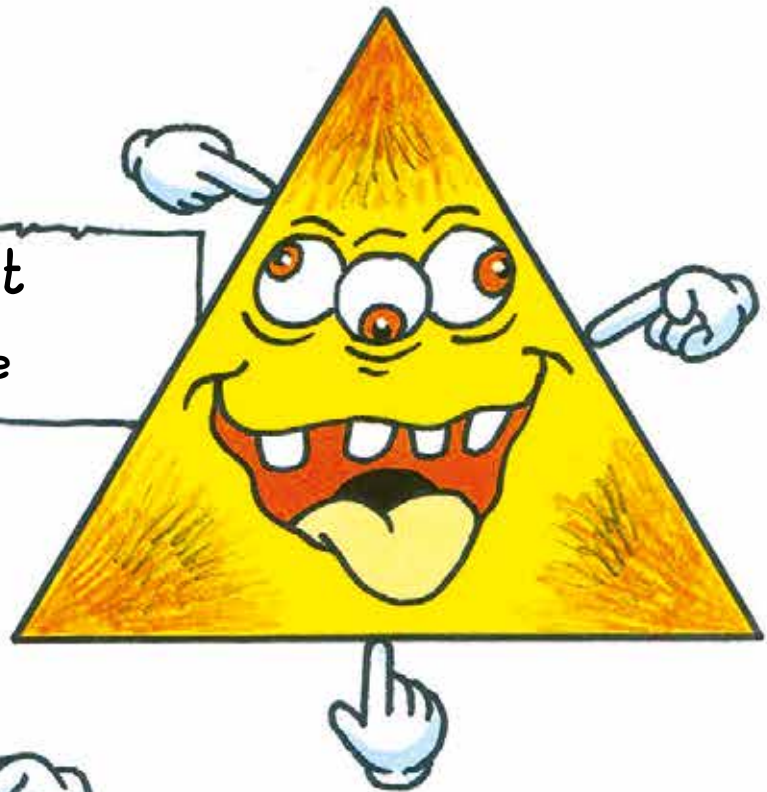
Spejl figurerne



Trekanter

Lige-sidet-trekant

Alle sider er lige lange



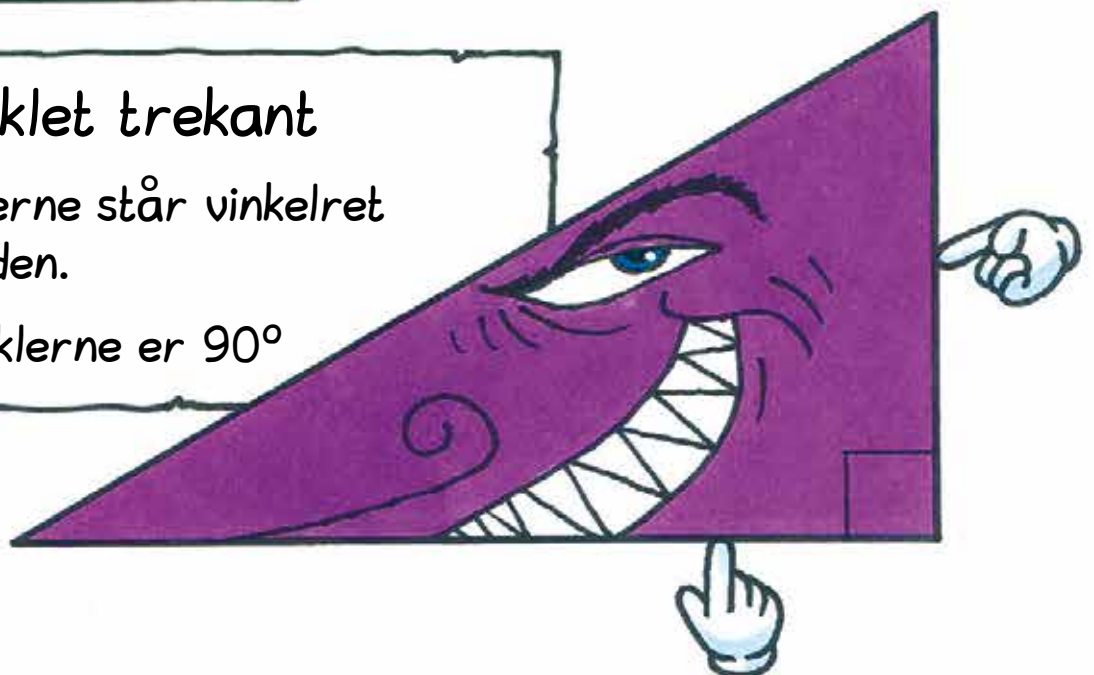
Lige-benet-trekant

To sider er lige lange

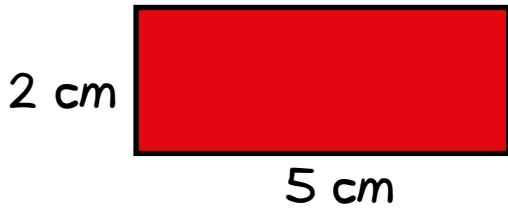
Ret-vinklet trekant

To af siderne står vinkelret på hinanden.

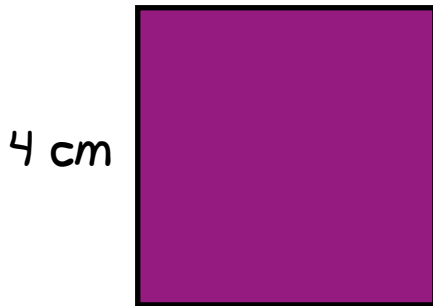
En af vinklerne er 90°



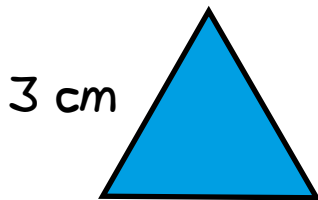
Hvad er omkredsen?



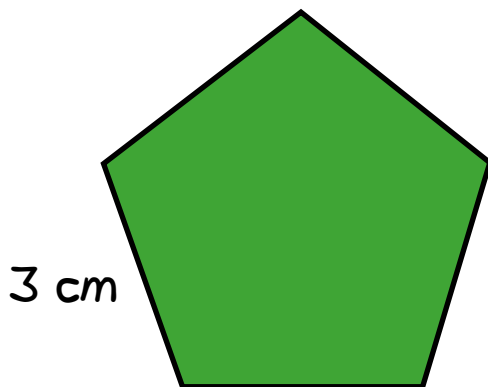
omkredsen af rektanglet = _____ cm



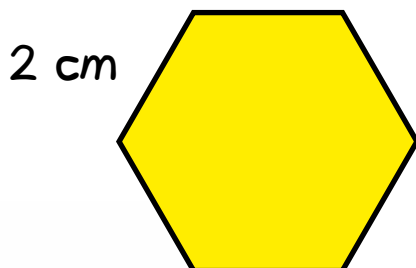
omkredsen af kvadratet = _____ cm



omkredsen af den ligesidede trekant = _____ cm



omkredsen af femkanten = _____ cm



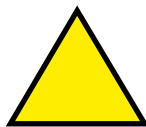
omkredsen af sekskanten = _____ cm



Tjek om omkredsen af alle figurerne er i alt 66 cm

Trekanter

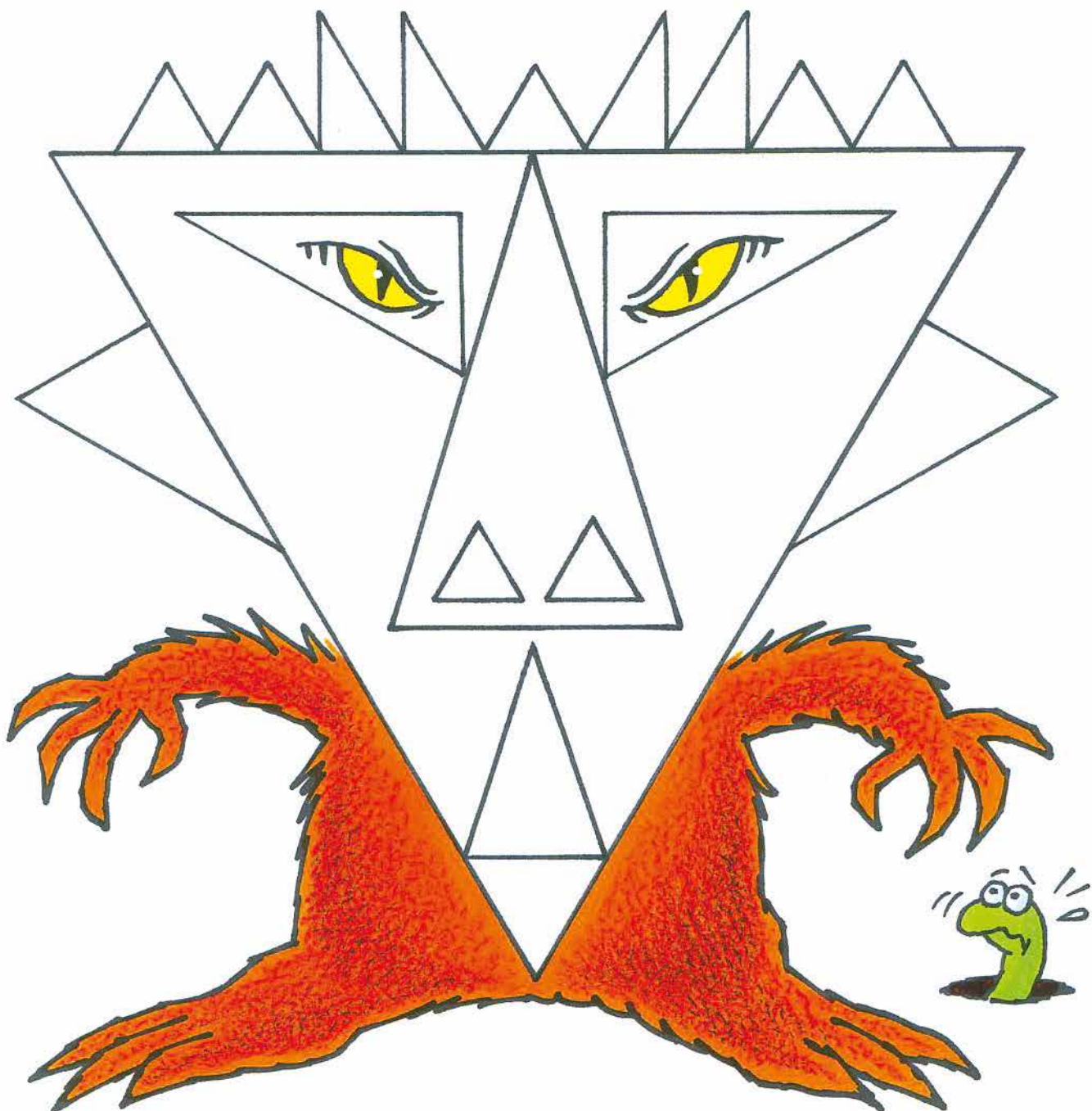
Farv de ligesidede trekanter gule



Farv de ligebenede trekanter grønne

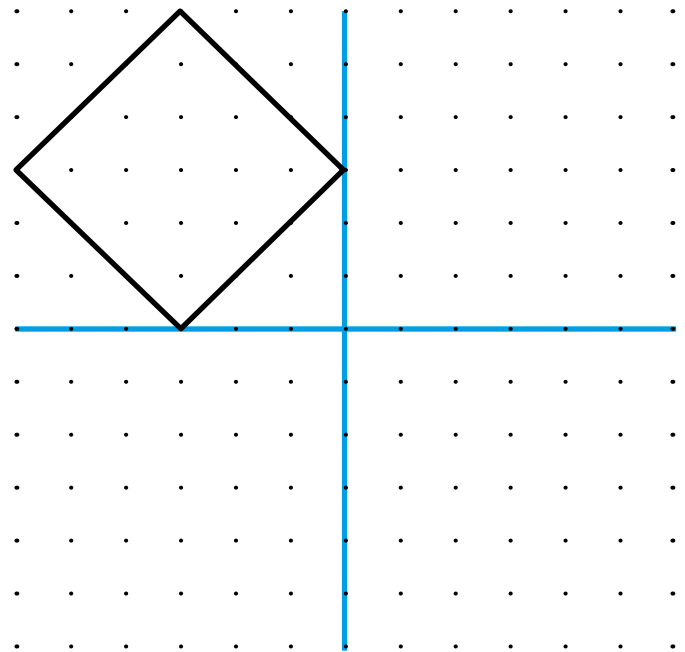
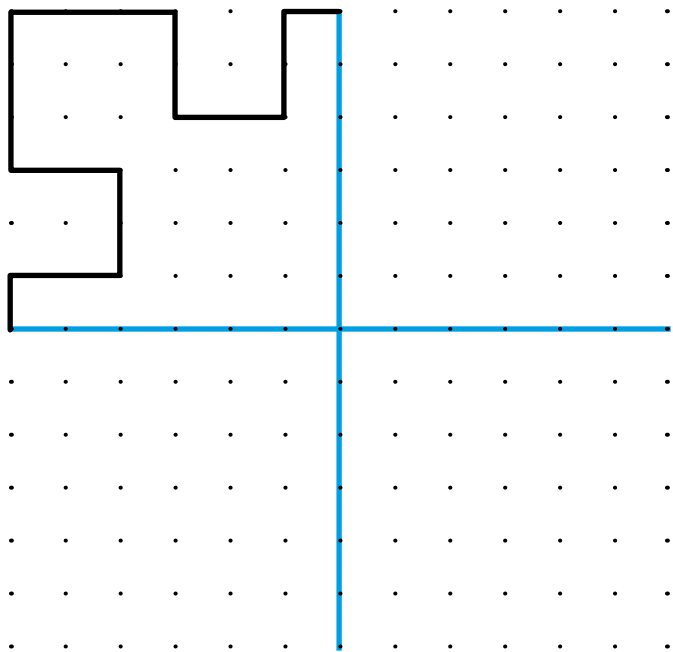
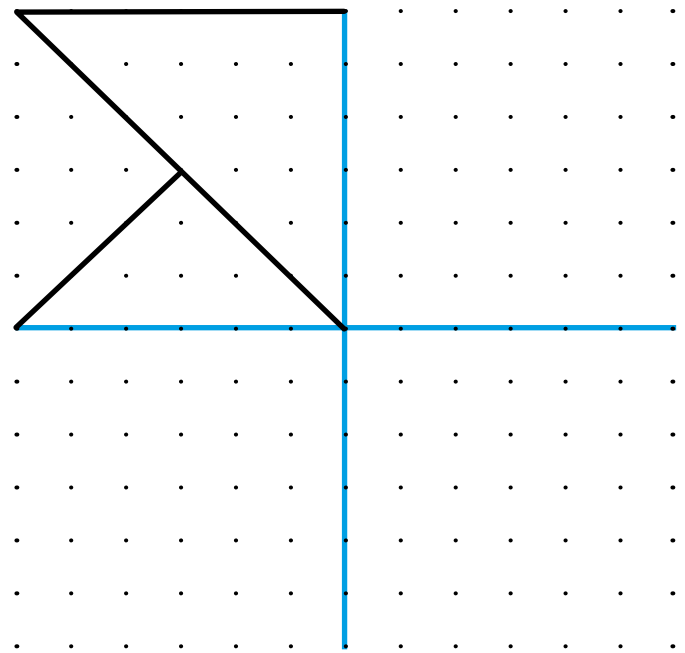
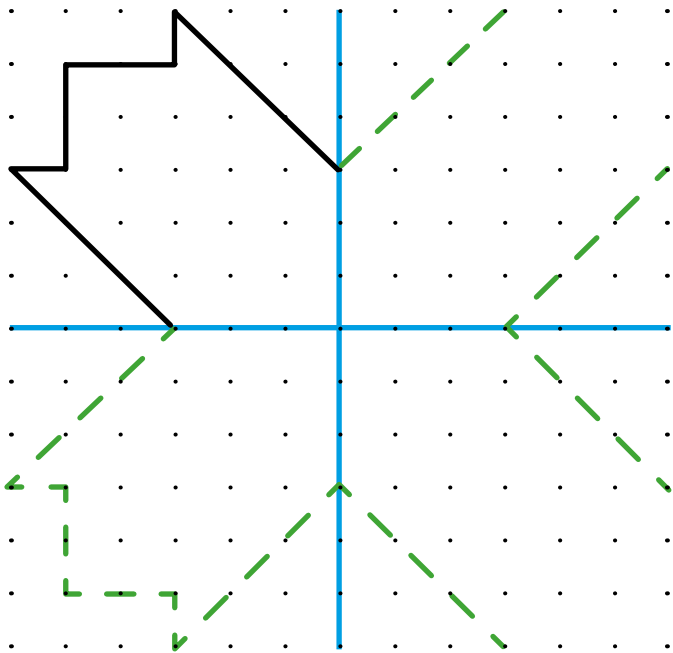
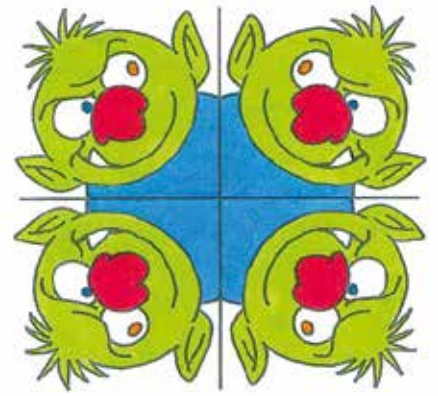


Farv de retvinklede trekanter lilla





Spejl figurerne



Forskellige firkanter



Rektangel

Siderne er parvis lige lange



Kvadrat

Alle fire sider er lige lange



Rombe

Fire lige lange sider



Parallelogram

Siderne er parvis parallelle og parvis lige lange



Trapez

To af siderne er lige lange

Farv firkanterne

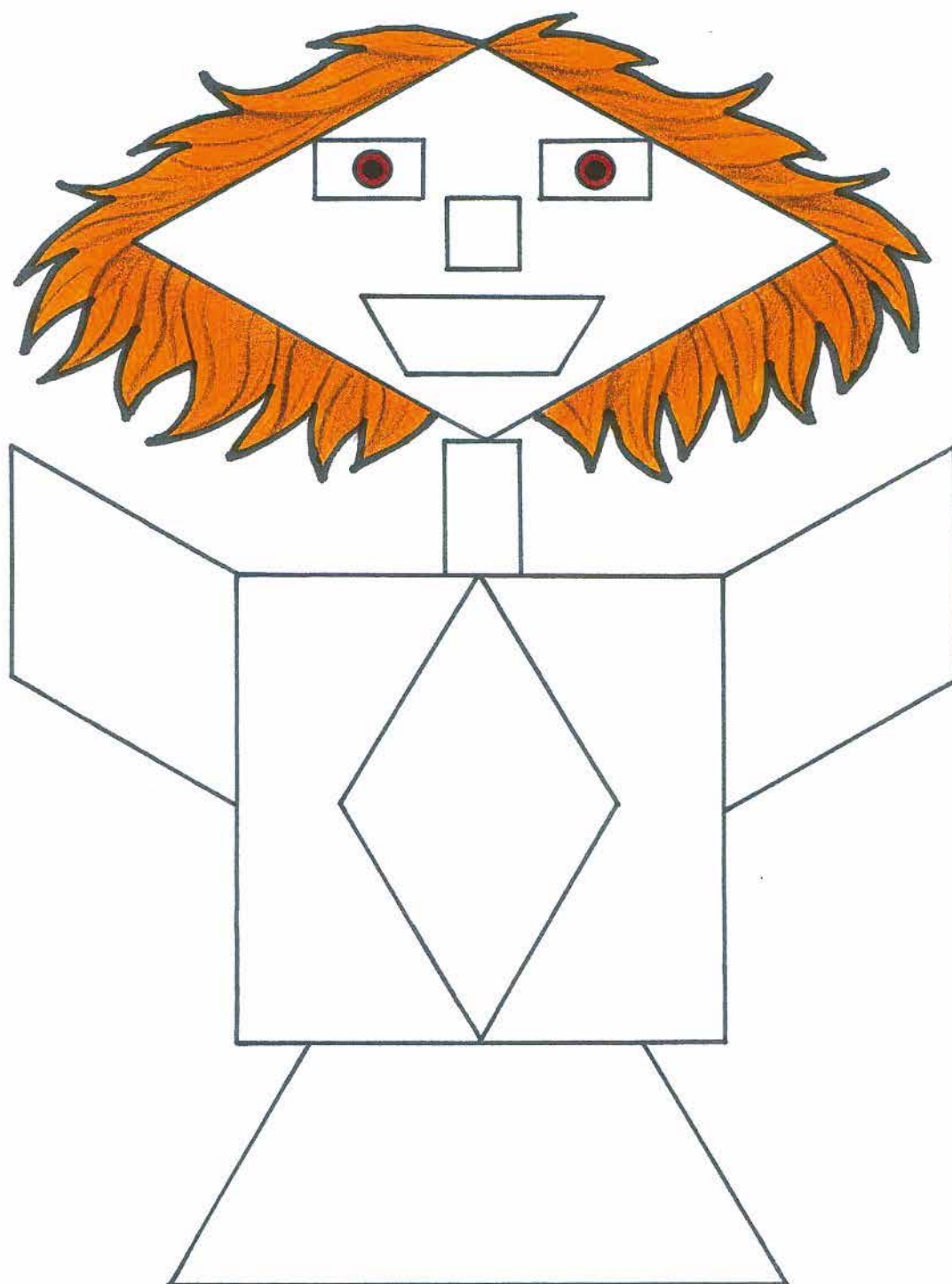
Farv kvadraterne **røde**

Farv romberne **grønne**

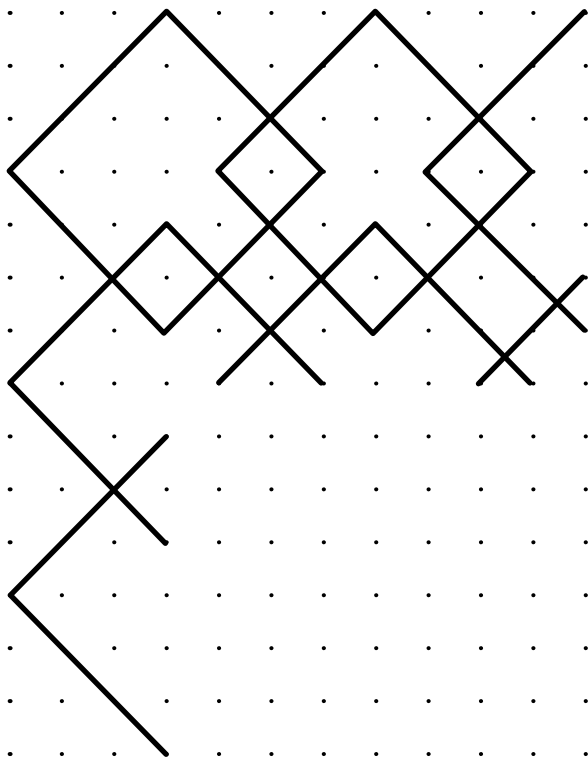
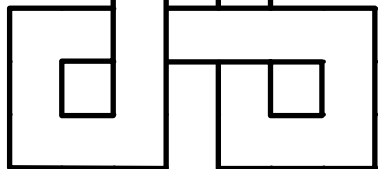
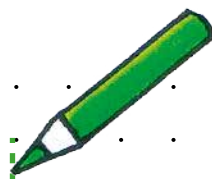
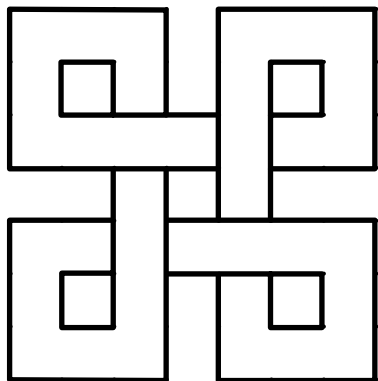
Farv rektanglerne **gule**

Farv trapezjerne **lilla**

Farv parallelogrammerne **blå**



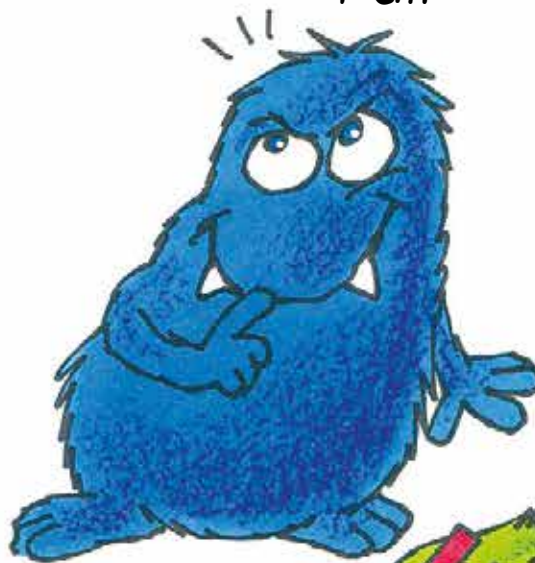
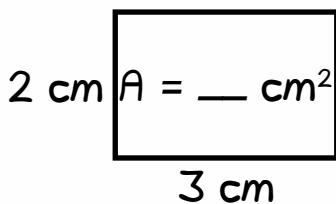
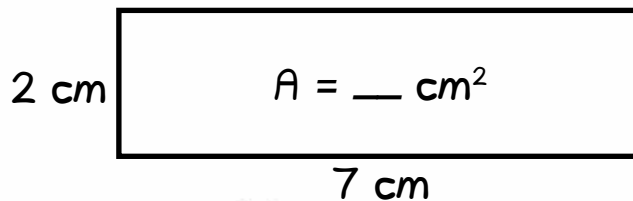
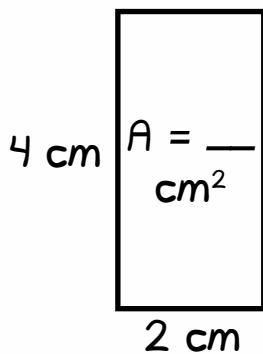
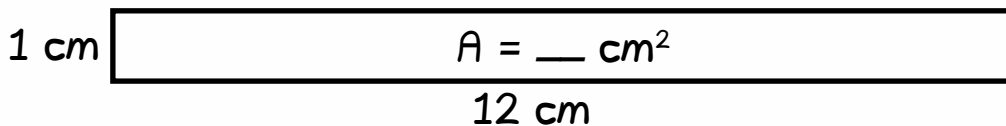
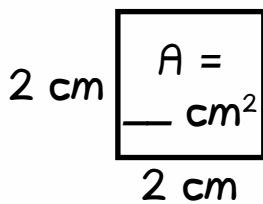
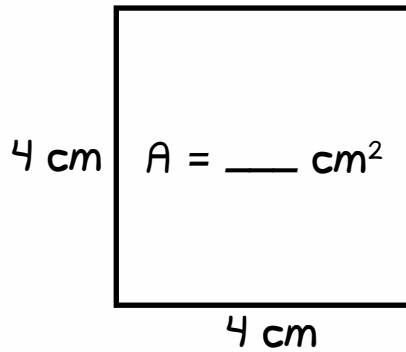
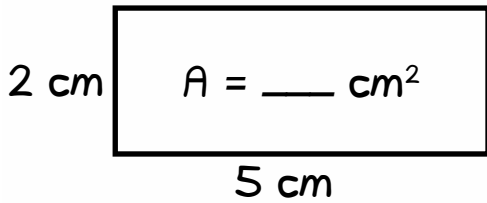
Tegn mønstrene færdige
og farv dem flot



Find arealet af firkanterne

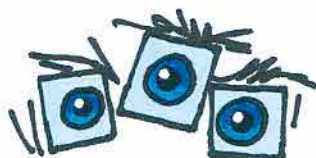
Arealet findes ved at gange længde (l) med bredde (b).

$$A = l \cdot b$$

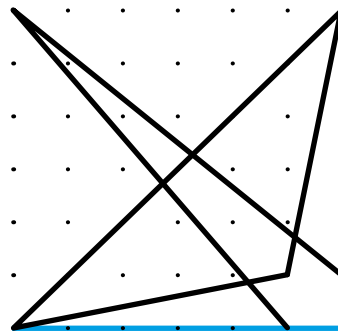
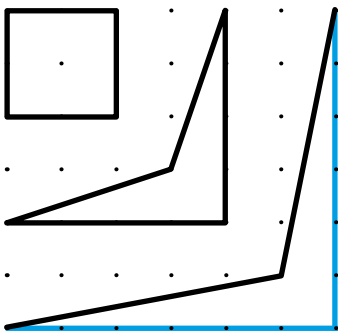
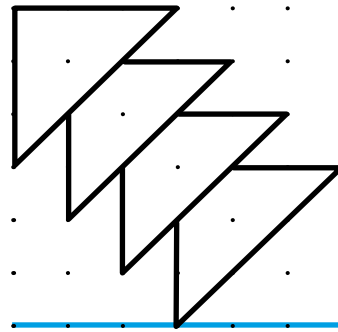
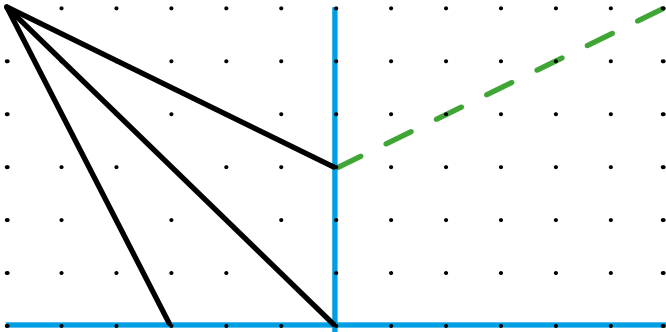


4 cm ²	6 cm ²	8 cm ²	10 cm²	12 cm ²	14 cm ²	16 cm ²
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Tegn sjove monstre og farv dem



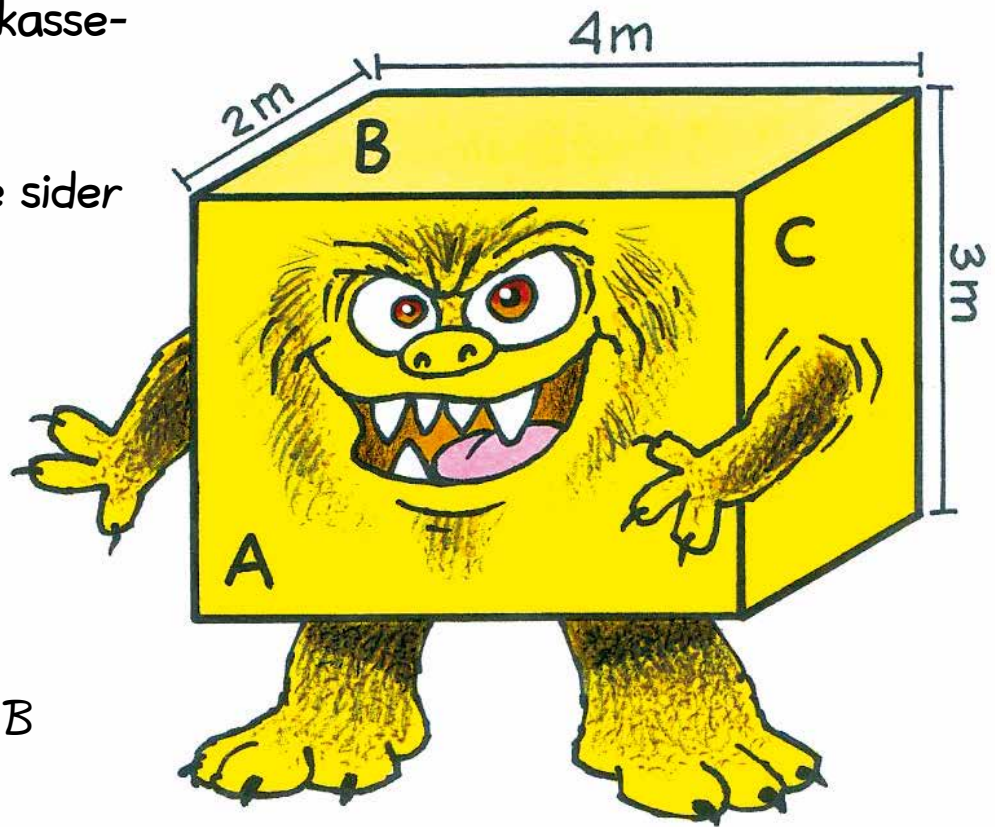
Spejl figurerne og farv dem flot



Kasse-monsteret KARLO

Hvor mange sider har kasse-monsteret?

Hvor mange forskellige sider har kasse-monsteret?

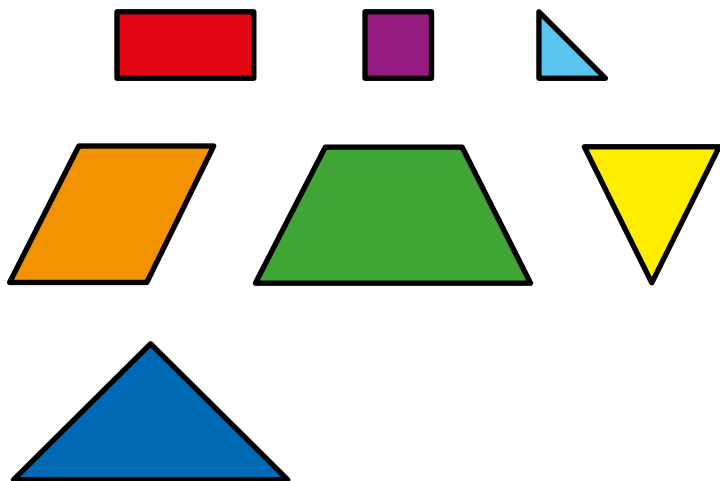


Tegn kassens flader A, B og C og skriv mål på

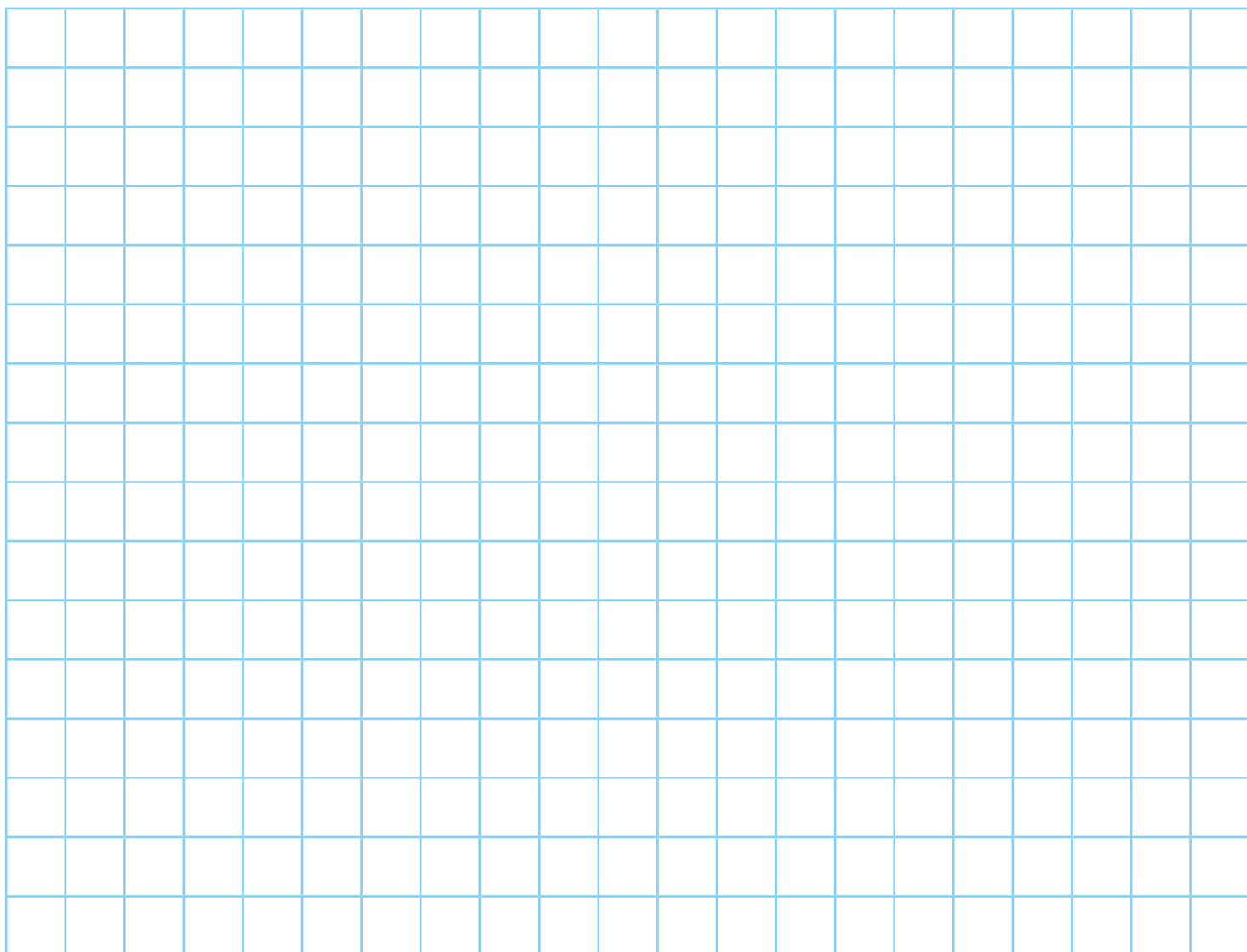
A									
B									
C									

Flade A		Flade B		Flade C	
Omkreds	Areal	Omkreds	Areal	Omkreds	Areal
m	m^2	m	m^2	m	m^2

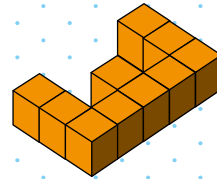
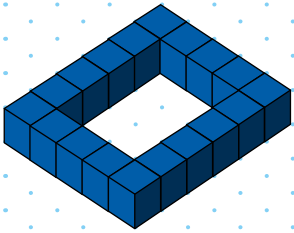
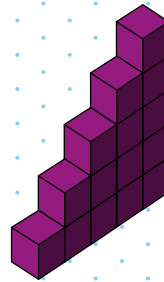
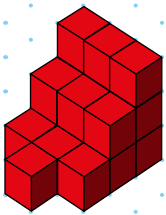
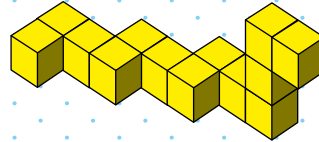
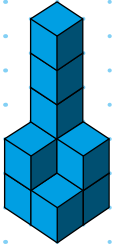
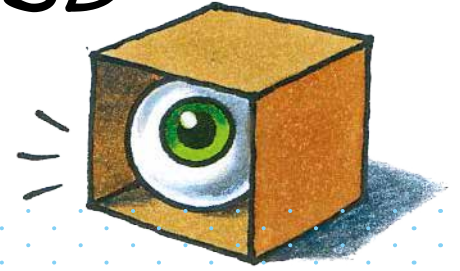
Geometrisk kunst



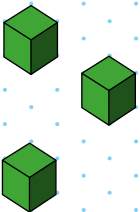
Tegn de geometriske figurer i samme størrelse og farve.
Du bestemmer helt selv, hvordan mønsteret skal se ud.



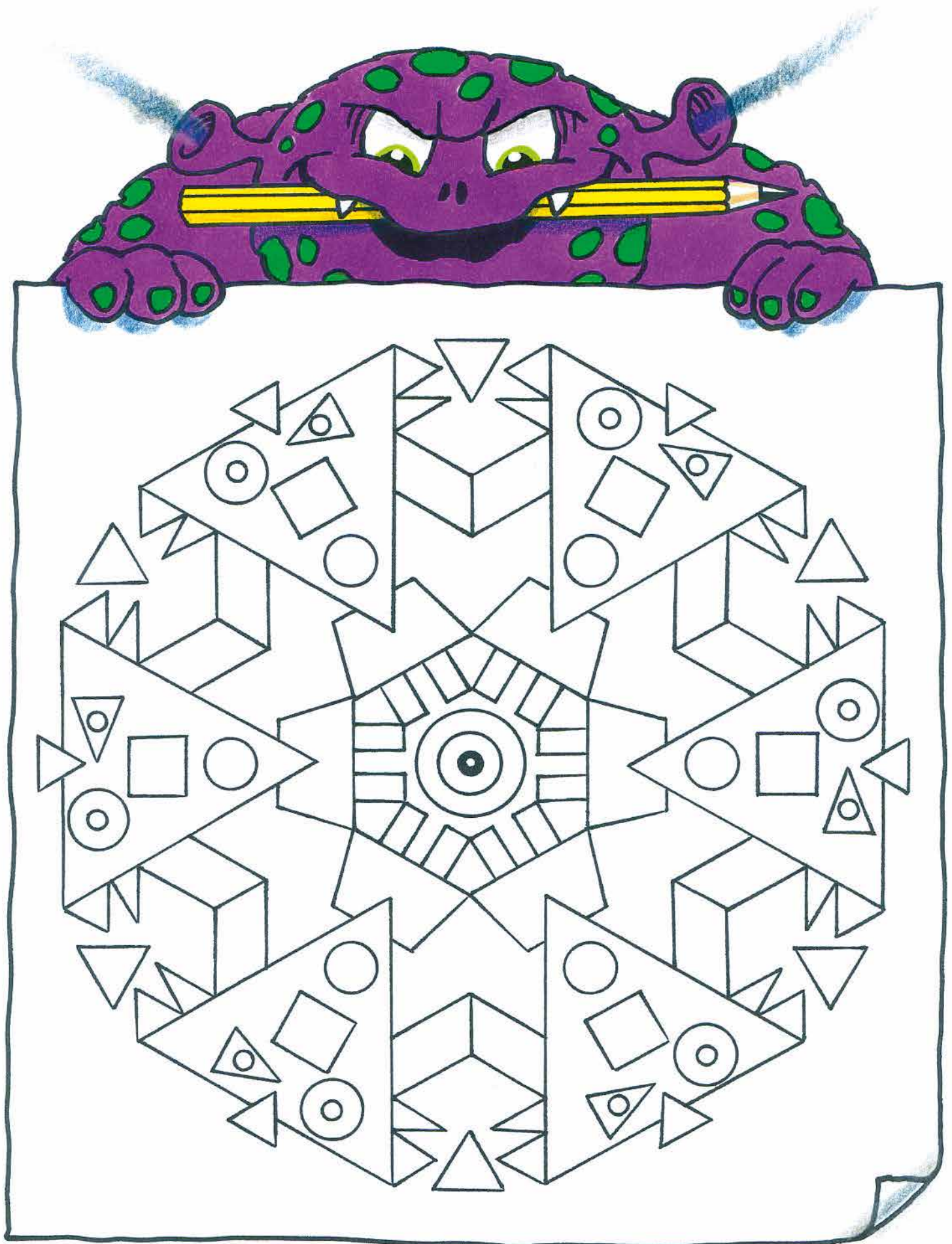
Tegn figurerne i 3D



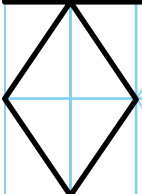
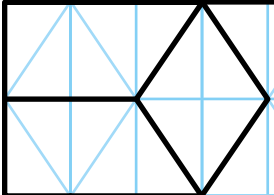
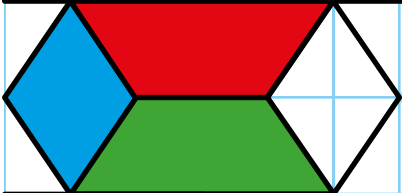
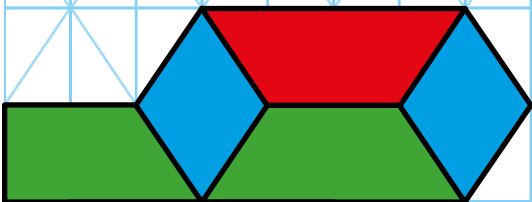
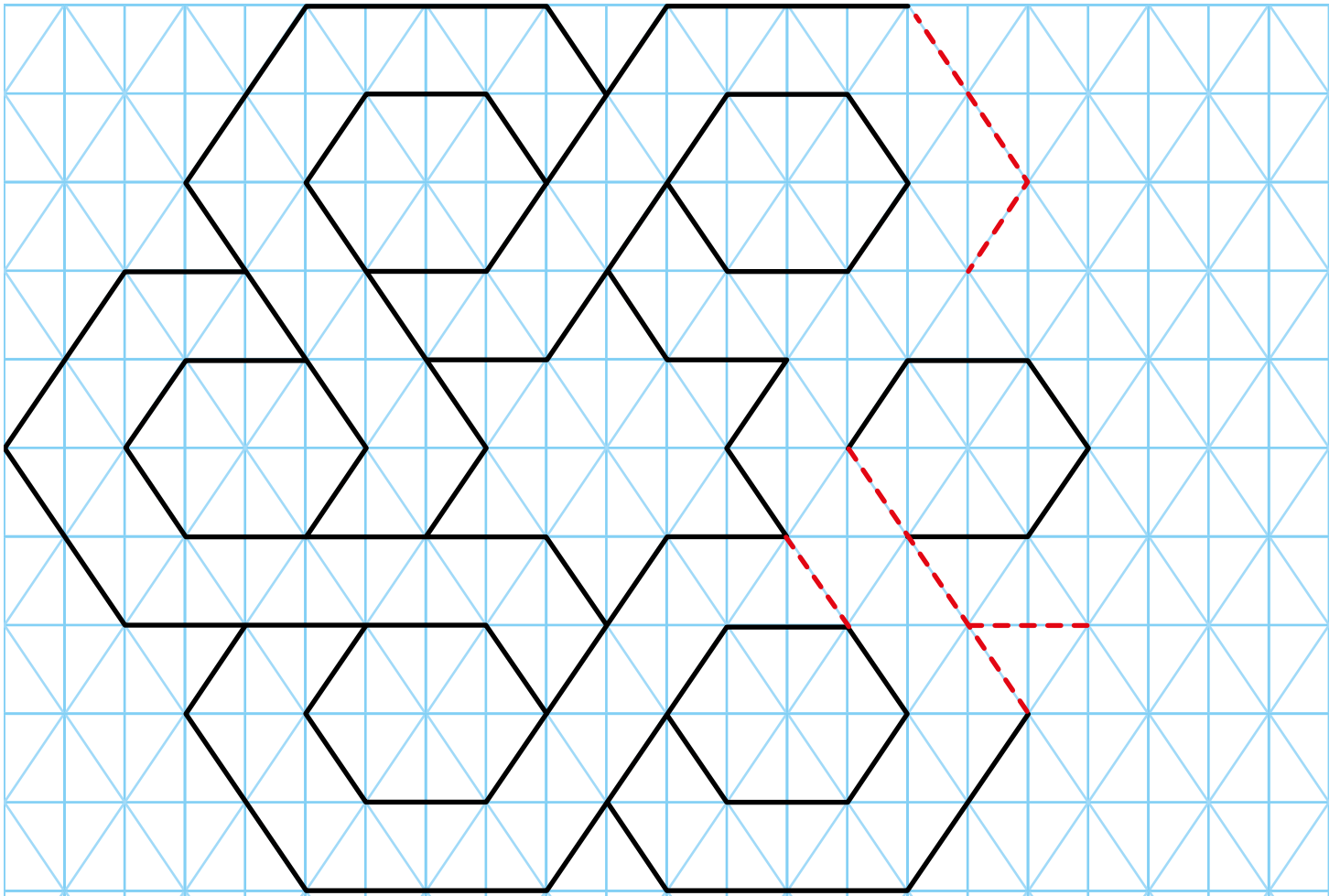
Tegn din egen figur



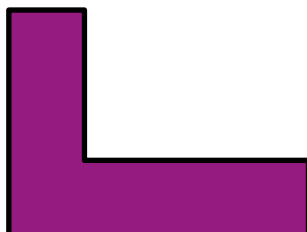
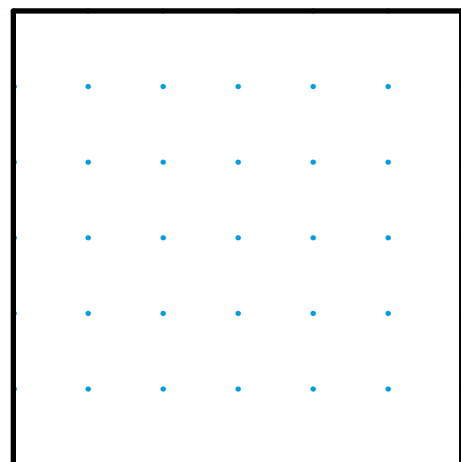
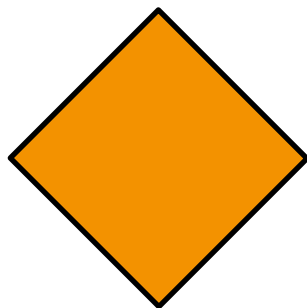
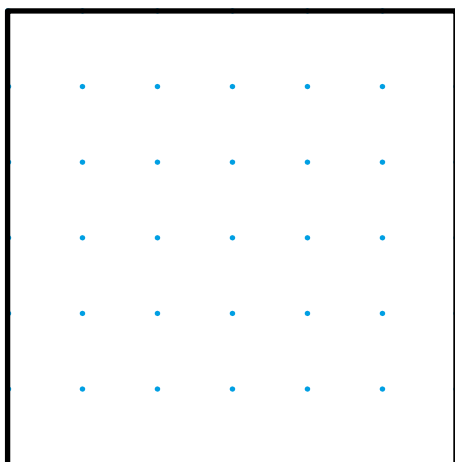
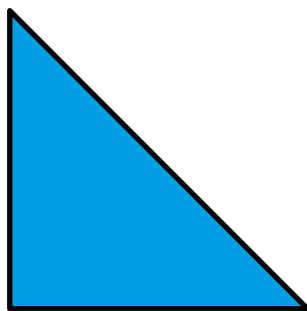
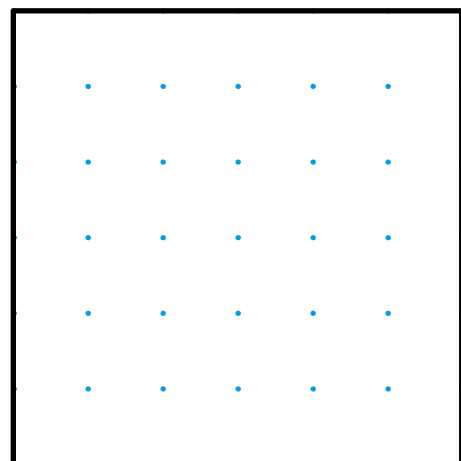
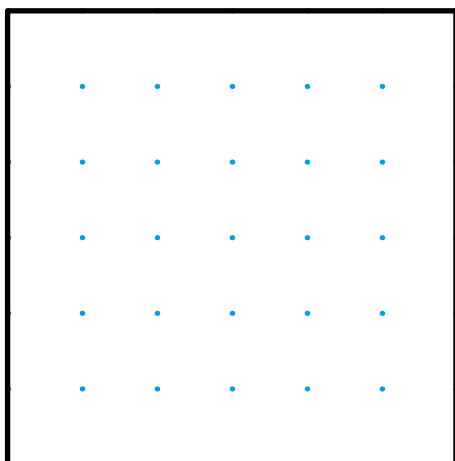
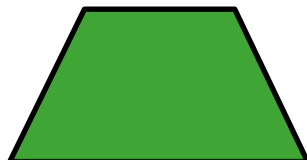
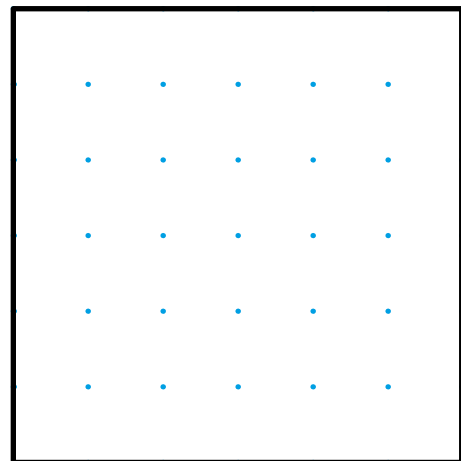
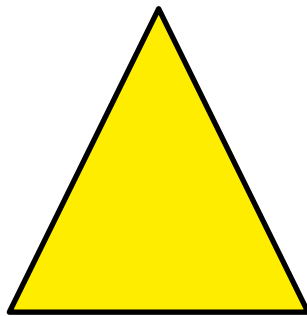
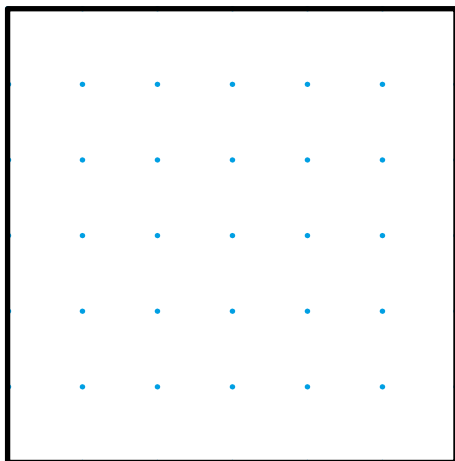
Farv mandala-tegningen



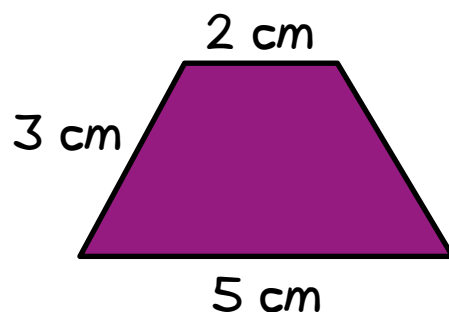
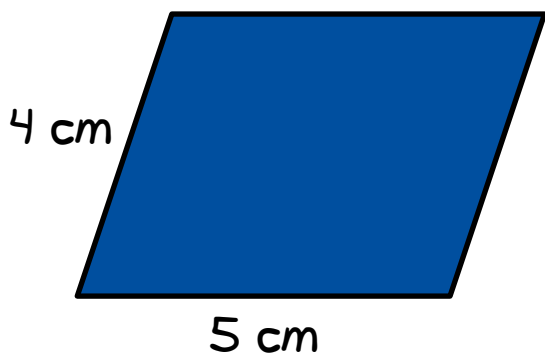
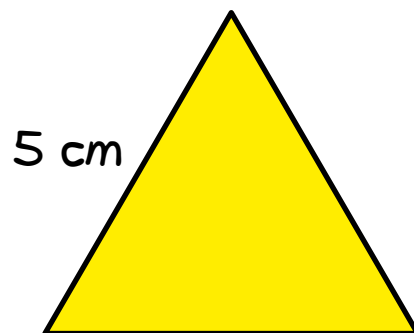
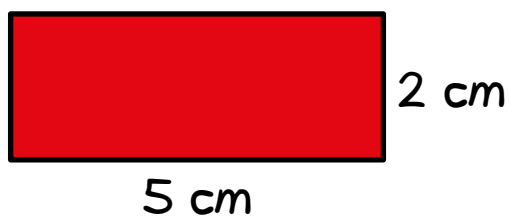
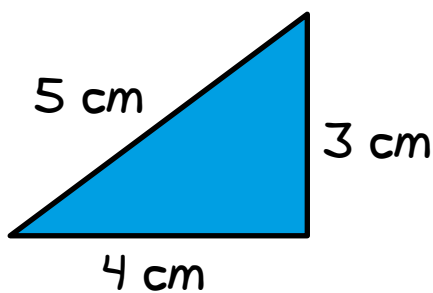
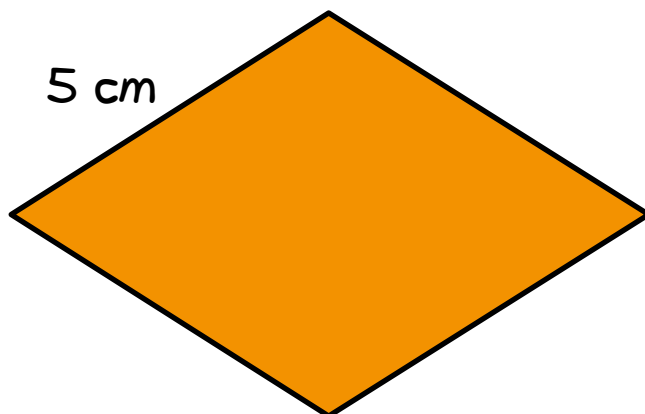
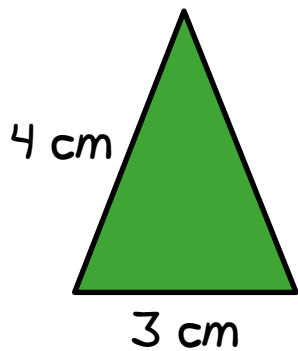
Mønstre på trekant-papir



Tegn figurene i firkanterne

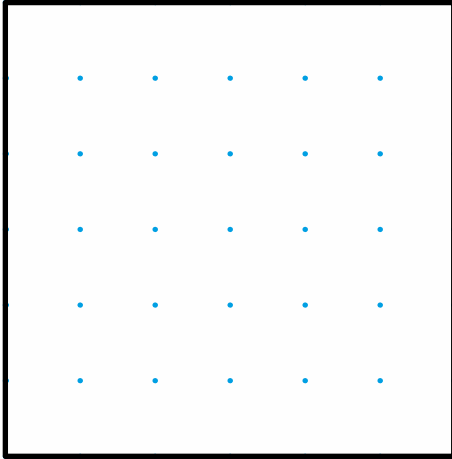
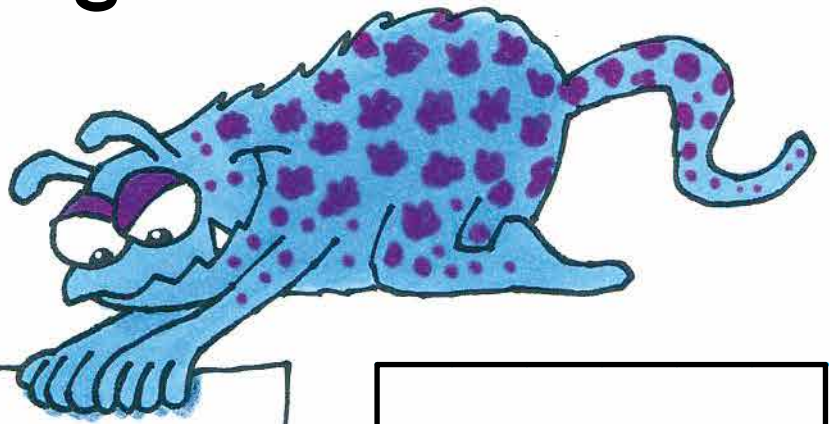


Hvad er omkredsen af figurerne?

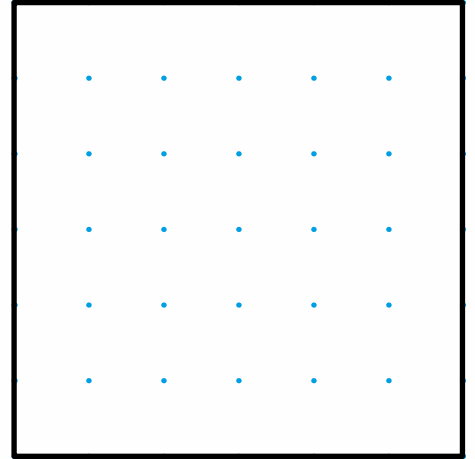


11 cm	12 cm	13 cm	14 cm	15 cm	16 cm	18 cm	20 cm
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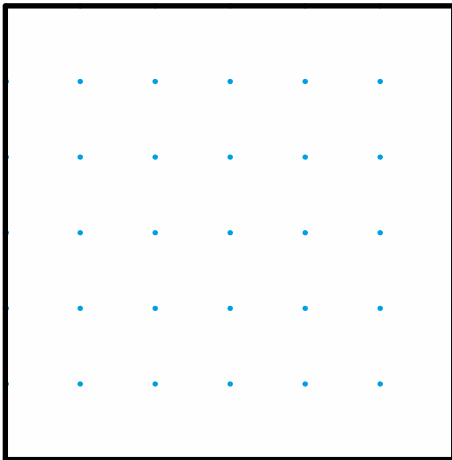
Tegn figurerne



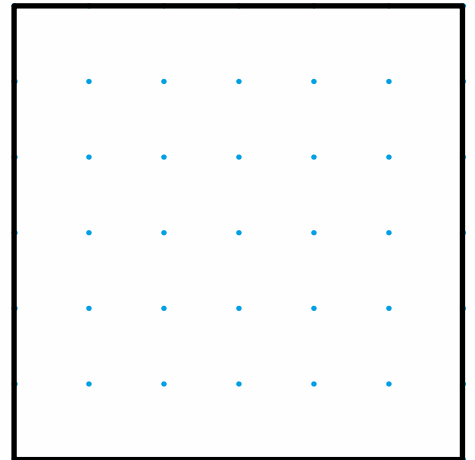
Kvadrat



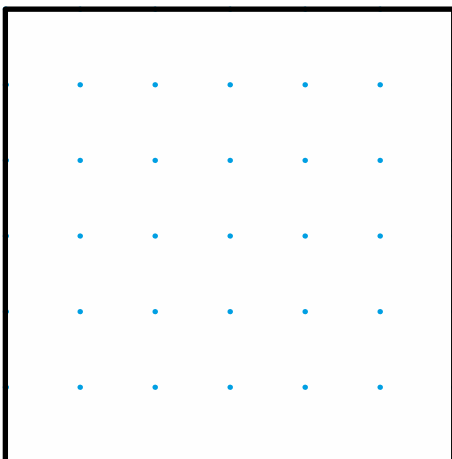
Rektangel



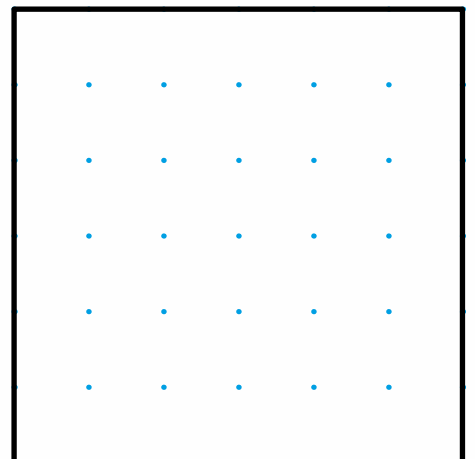
Trekant



Femkant



Sekskant



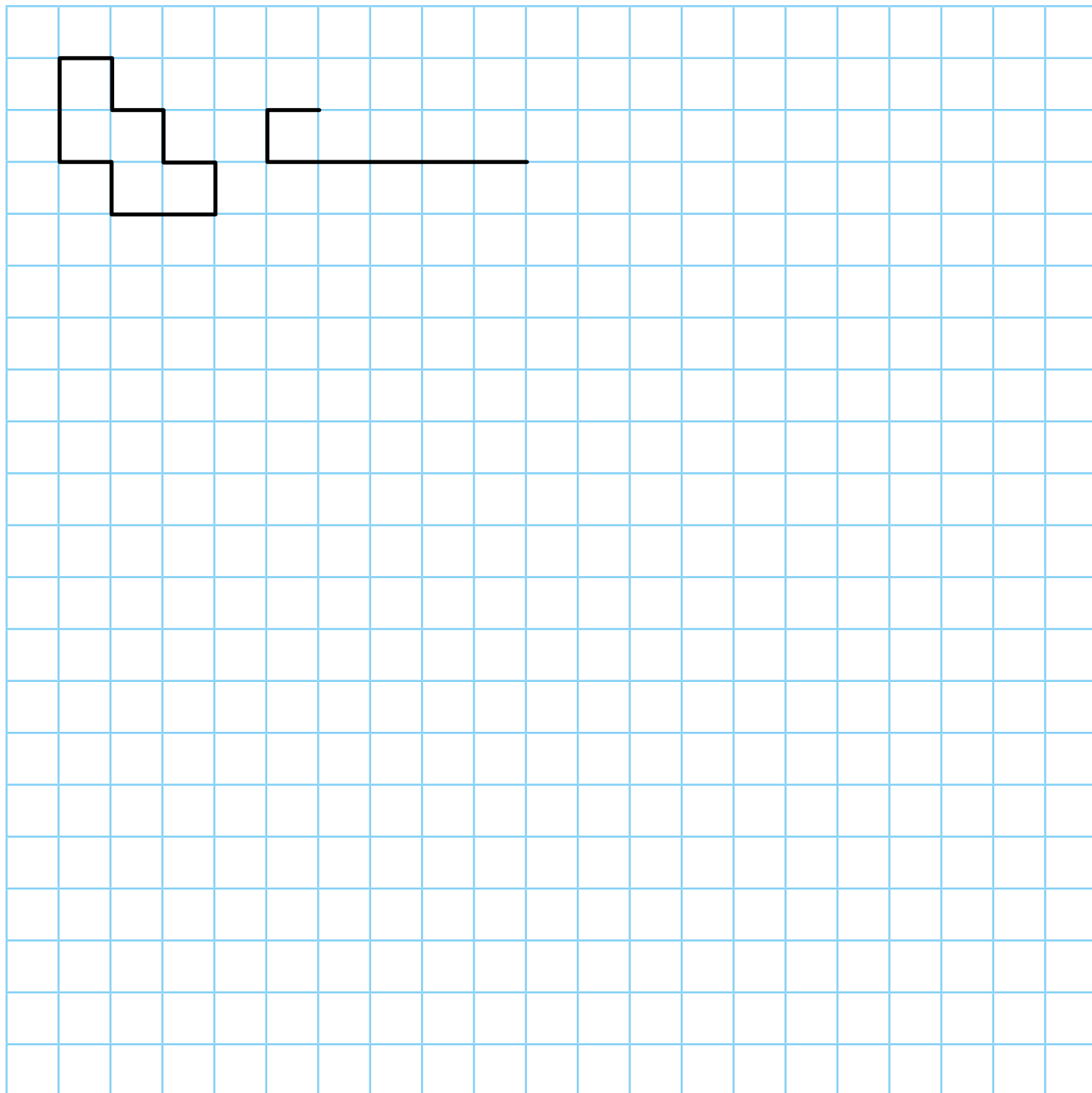
Cirkel



Pentomino

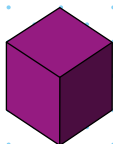
Penta betyder 5 og en pentomino er en figur, der er dannet af 5 tern.

Tegn så mange forskellige pentomino'er som du kan finde på.

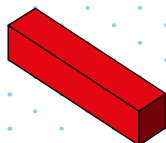
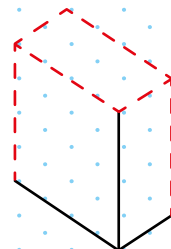


Har du 12 helt forskellige figurer, er du bare monster-god.

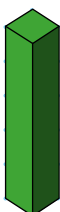
Tegn kasserne



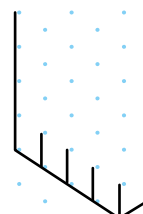
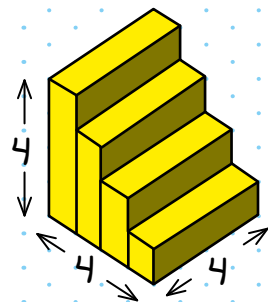
Længde: 3 tern
Højde: 4 tern
Bredde: 2 tern



Længde: 8 tern
Højde: 2 tern
Bredde: 2 tern

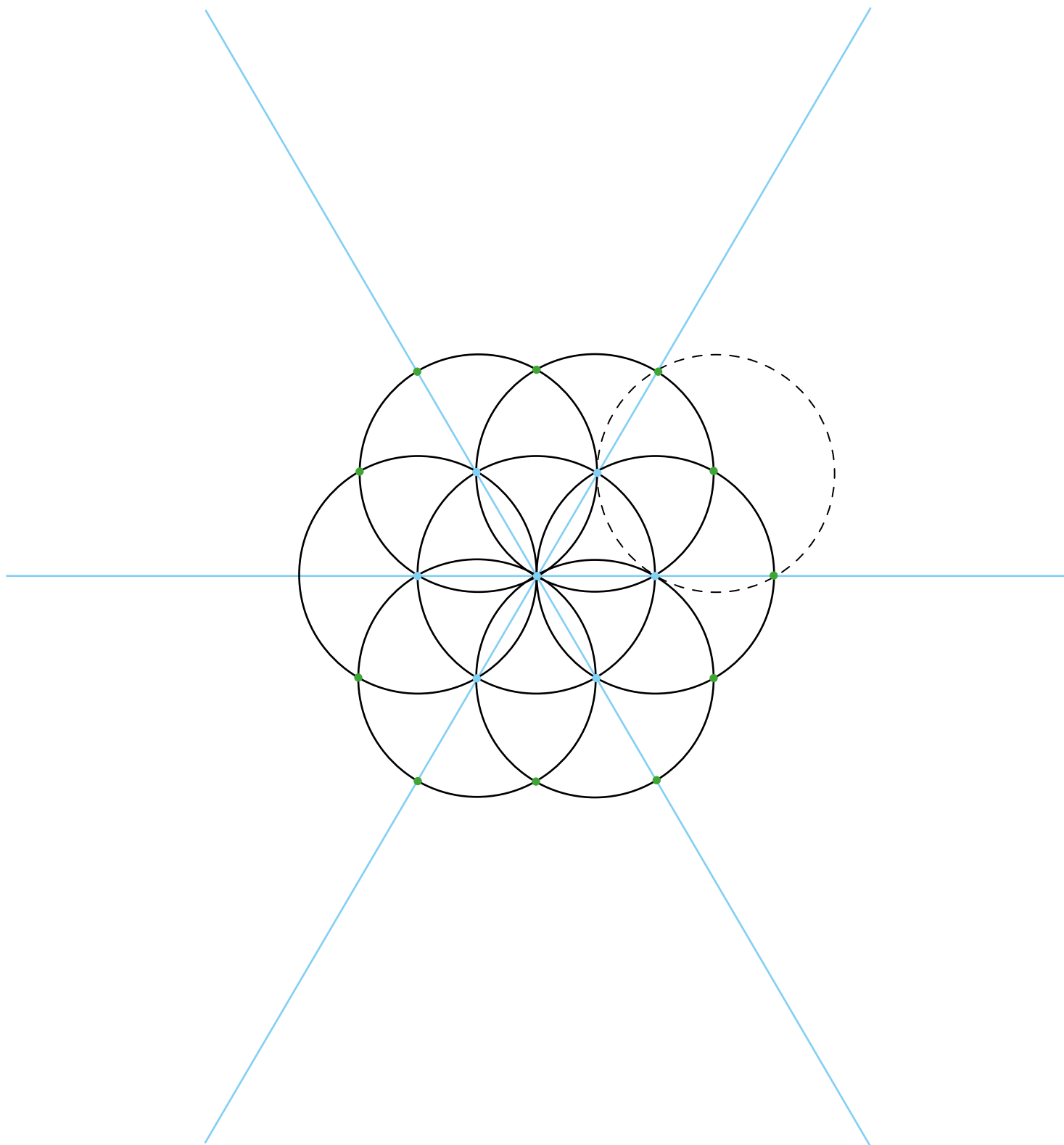


Længde: 2 tern
Højde: 6 tern
Bredde: 3 tern



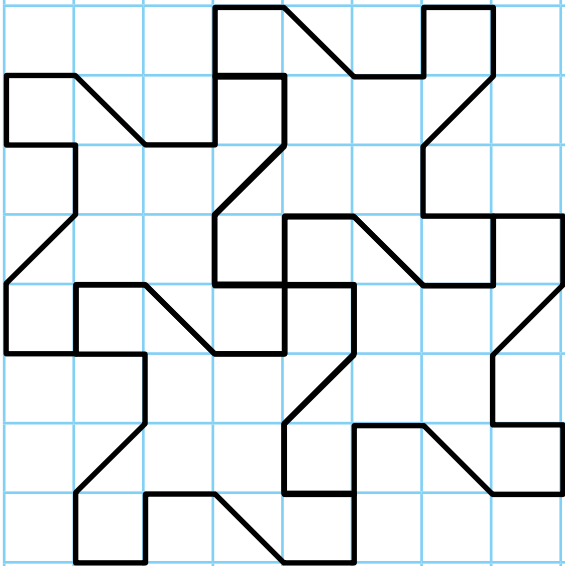
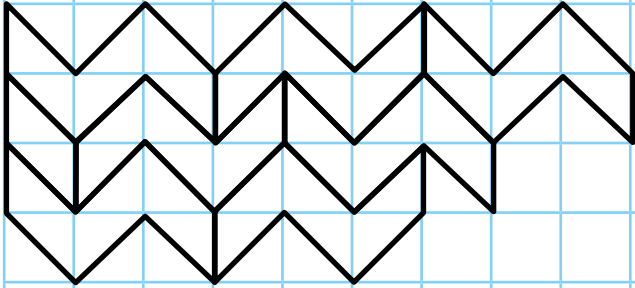
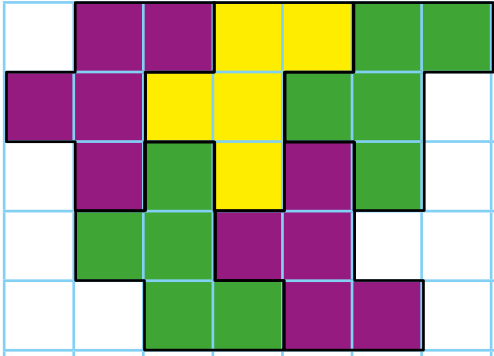
Tegn cirkler i et flot mønster

Brug en passer. Der skal være 2 cm mellem passerens "ben".
Sæt spidsen af passeren i de grønne prikker og tegn nye cirkler.
Fortsæt indtil hele siden er fyldt ud. Farv mønsteret flot.



Tesselationer

Tesselationer er mønstre med geometriske figurer.
Tegn mønstrene færdige og farv dem flot.



Hvilke to figurer passer inden i hinanden?

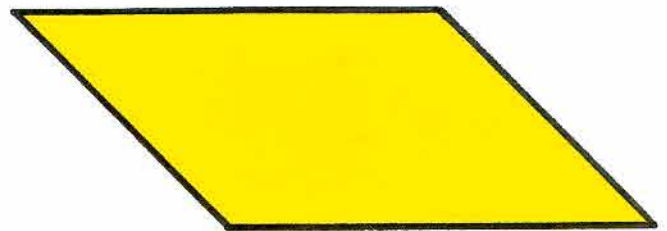
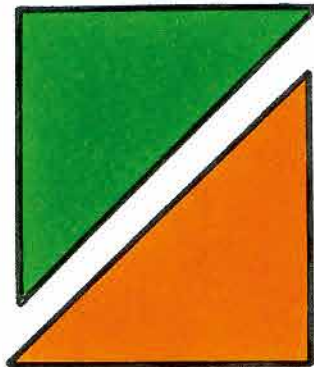
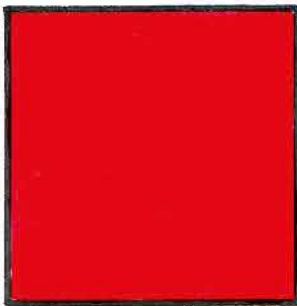
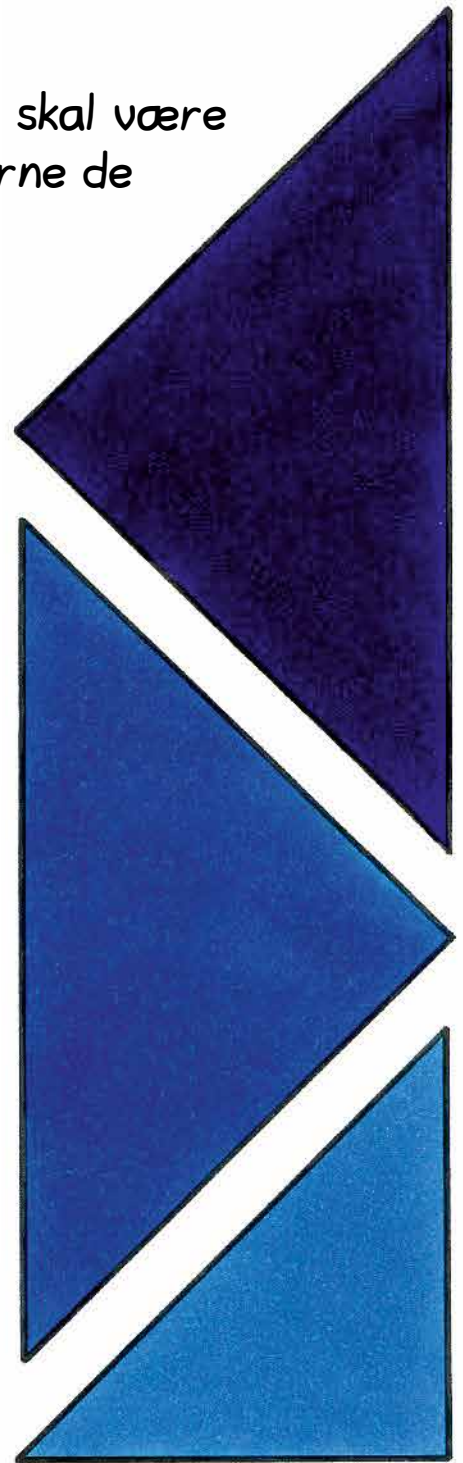
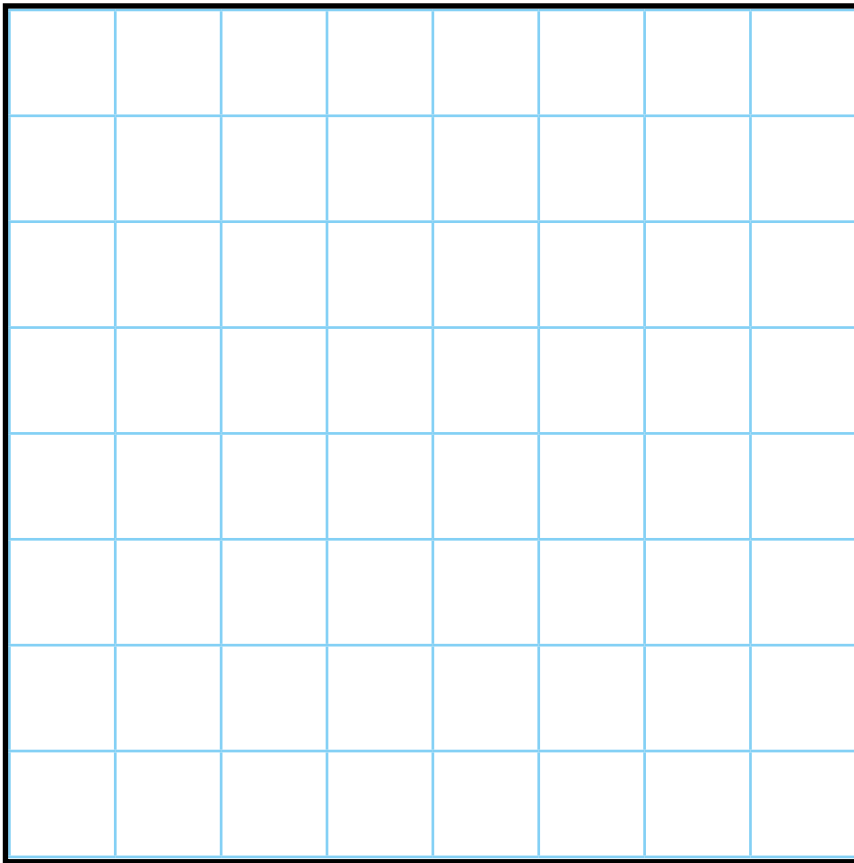


<p>1</p>	<p>2</p>	<p>3</p>	<p>og</p>
<p>4</p>	<p>5</p>	<p>6</p>	<p>og</p>
<p>7</p>	<p>8</p>	<p>9</p>	<p>og</p>
<p>10</p>	<p>11</p>	<p>12</p>	<p>og</p>
			<p>og</p>
			<p>og</p>

Tangram puslespil

Tegn de syv figurer ind i kvadratet.

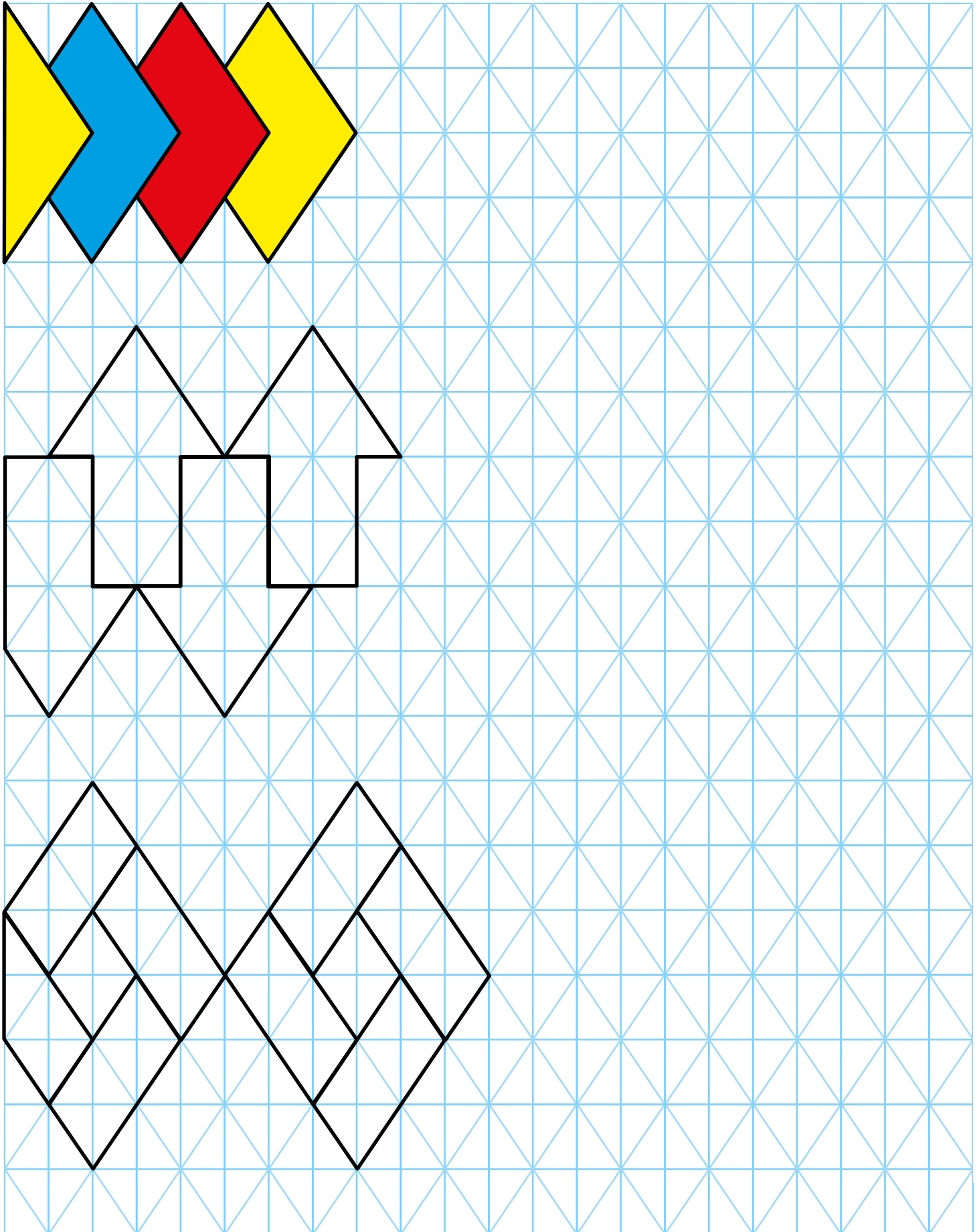
Du skal tegne dem i samme størrelse og der skal være plads til dem alle. Når du har tegnet stregerne de rigtige steder, så skal du farve figurerne.



Figurerne kan også kopieres og limes fast de rigtige steder.

Tesselationer på trekant-papir

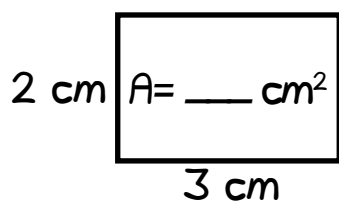
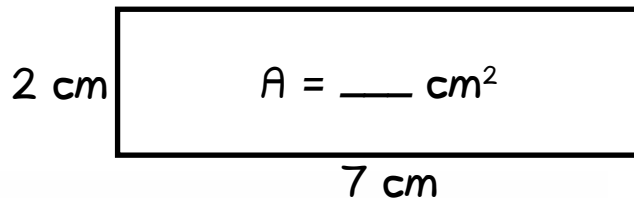
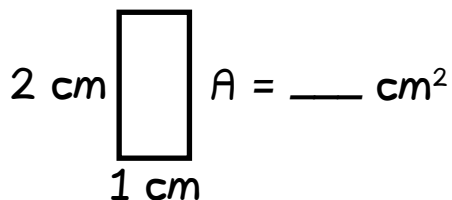
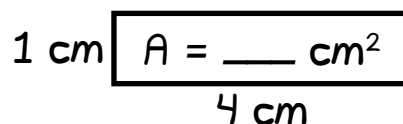
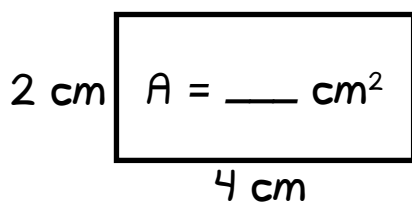
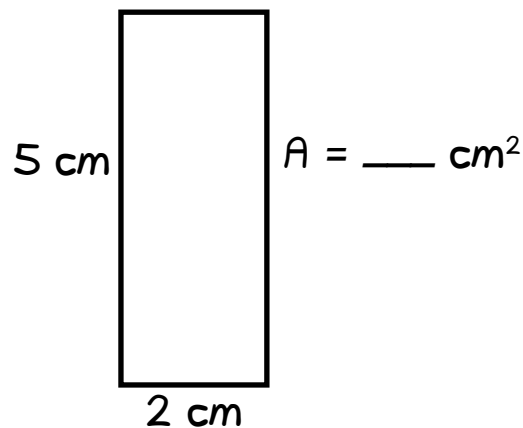
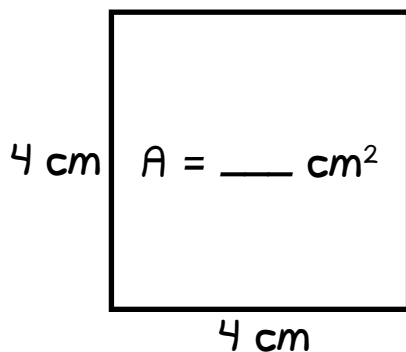
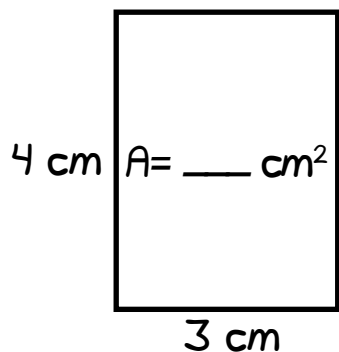
Tegn mønsteret færdigt og farv det flot.



Find arealet af firkanterne

Arealet findes ved at gange længde med bredde.

$$A = l \cdot b$$



Tjek om du har regnet rigtigt

2 cm ²	4 cm ²	6 cm ²	8 cm ²	10 cm²	12 cm ²	14 cm ²	16 cm ²
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Café Matematik er matematikhæfter til brug i skolens lektiecafé eller hvor der er behov for matematikmaterialer, som eleverne kan arbejde i individuelt og på hver deres niveau. Opgaverne er selvkontrollerende, og forklaringerne er skrevet med enkle ord og sætninger eller illustreret med små tegninger.

Opgavehæfterne er ikke klasseinddelte, da de netop skal passe til den enkelte elevs niveau, men hæfterne følger Fælles Mål. Café Matematik supplerer de materialer, der bruges i den daglige undervisning, samt træner og øger elevernes faglige niveau.

I dette hæfte øves:

Navne på og genkendelse af forskellige og konkrete geometriske figurer.

Former, størrelser og forskelligheder. Mønstre, symmetri og spejling. Sammenhænge mellem tal og geometri. Måling af afstand, flade og rum og brug af enkle formler samt udregning af omkreds og areal.



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