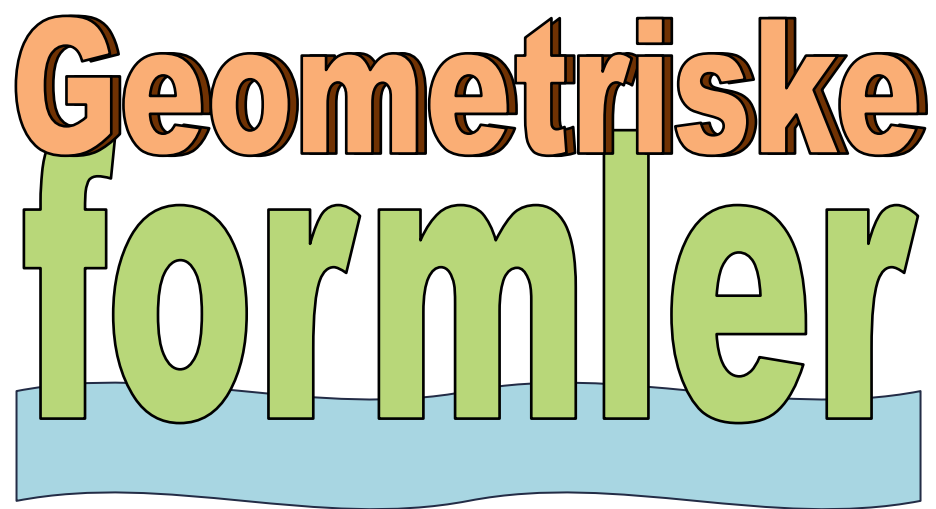


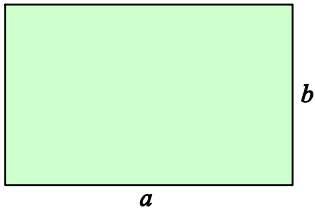
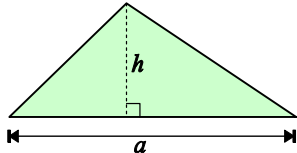
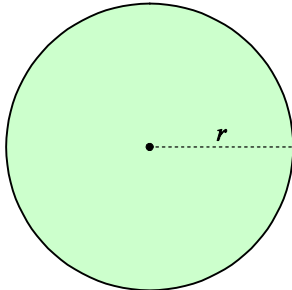
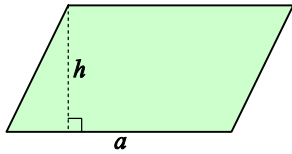
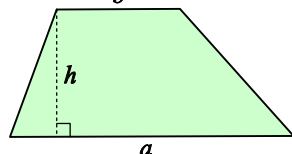
Geometriske formler

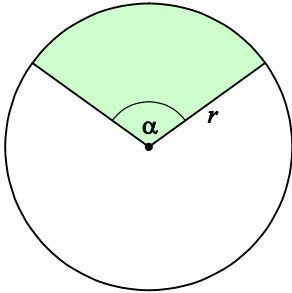
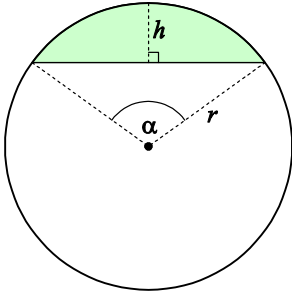
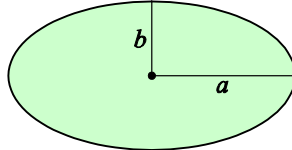
The title 'Geometriske formler' is presented in a playful, stylized font. The word 'Geometriske' is in orange with a black outline, and 'formler' is in green with a black outline. Both words are set against a light blue, wavy-edged rectangular background that resembles a piece of paper or a banner.

I dette tillæg kan du finde formler for arealer og omkredse af *plane* figurer og rumfang og overfladearealer af *rumlige* figurer.

Plane figurer

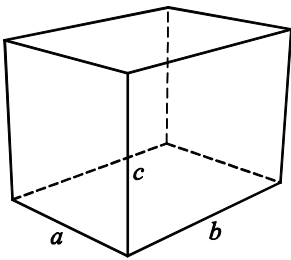
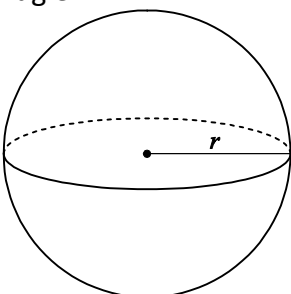
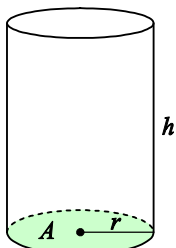
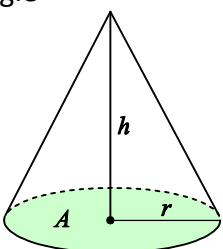
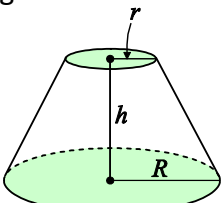
Kun de relevante omkredse angives, og de inkluderer både omkreds af krumme kurver og rette linjestykker.

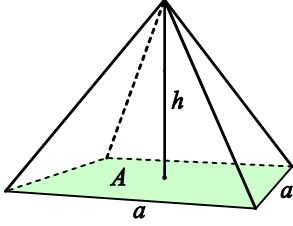
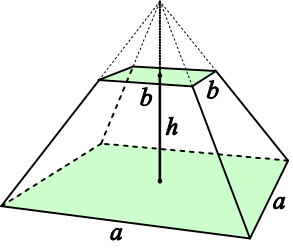
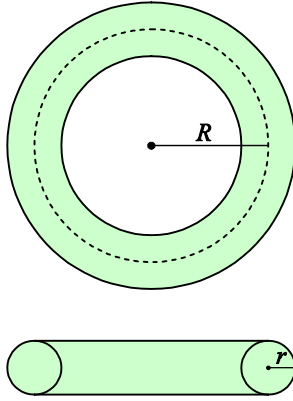
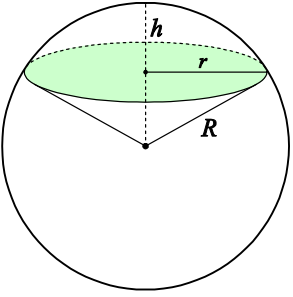
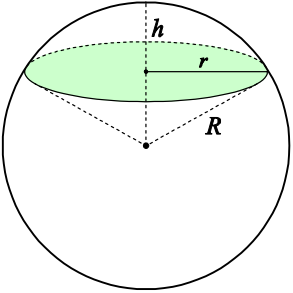
Figur	Areal	Omkreds
Rektangel 	$a \cdot b$	$2a + 2b$
Trekant 	$\frac{1}{2} \cdot a \cdot h$	
Cirkel 	$\pi \cdot r^2$	$2 \cdot \pi \cdot r$
Parallelogram 	$a \cdot h$	
Trapez 	$\left(\frac{a+b}{2}\right) \cdot h$	

<p>Cirkeludsnit (α regnet i grader)</p> 	$\frac{\alpha}{360} \cdot \pi \cdot r^2$	$\frac{\alpha}{360} \cdot 2 \cdot \pi \cdot r + 2r$
<p>Cirkelafsnit (α regnet i grader)</p> 	$\frac{r^2}{2} \cdot \left(\frac{\pi \cdot \alpha}{180} - \sin(\alpha) \right)$ <p>og</p> $h = r \cdot \left(1 - \cos\left(\frac{1}{2}\alpha\right) \right)$	$2 \cdot \pi \cdot r \cdot \frac{\alpha}{360} + 2r \cdot \sin\left(\frac{1}{2}\alpha\right)$
<p>Ellipse</p> 	$\pi \cdot a \cdot b$	

Rumlige figurer

Kun de relevante overfladearealer angives, og de inkluderer både overflade arealer af krumme flader og plane flader.

Figur	Rumfang	Overfladeareal
Kasse 	$a \cdot b \cdot c$	$2 \cdot a \cdot b + 2 \cdot a \cdot c + 2 \cdot b \cdot c$
Kugle 	$\frac{4}{3} \pi r^3$	$4\pi r^2$
Cylinder 	$\pi \cdot r^2 \cdot h$	$2 \cdot \pi \cdot r \cdot h + 2 \cdot \pi \cdot r^2$
Kegel 	$\frac{1}{3} \cdot h \cdot \pi \cdot r^2$ ($= \frac{1}{3} \cdot h \cdot A$)	$\pi \cdot r \cdot \sqrt{r^2 + h^2} + \pi \cdot r^2$
Keglestub 	$\frac{1}{3} \pi h \cdot (R^2 + r^2 + rR)$	$\pi(R+r) \cdot \sqrt{(R-r)^2 + h^2} + \pi \cdot (R^2 + r^2)$

<p>Pyramide</p> 	$\frac{1}{3} \cdot h \cdot a^2 \quad \left(= \frac{1}{3} \cdot h \cdot A \right)$	$a \cdot \sqrt{a^2 + 4h^2} + a^2$
<p>Pyramidestub</p> 	$\frac{1}{3} \cdot h \cdot (a^2 + b^2 + ab)$	
<p>Torus</p> 	$2 \cdot \pi^2 \cdot r^2 \cdot R$	$4 \cdot \pi^2 \cdot r \cdot R$
<p>Kugleudsnit</p> 	$\frac{2}{3} \cdot \pi \cdot R^2 \cdot h$	$\pi \cdot R \cdot (r + 2h)$
<p>Kugleabsnit</p> 	$\frac{\pi}{6} \cdot h \cdot (3r^2 + h^2)$	$2 \cdot \pi \cdot R \cdot h + \pi \cdot r^2$ <p>eller</p> $\pi \cdot (r^2 + h^2) + \pi \cdot r^2$