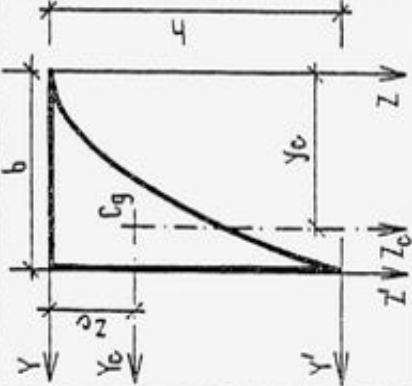
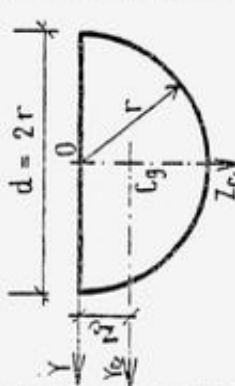
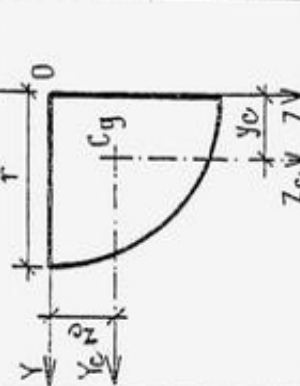
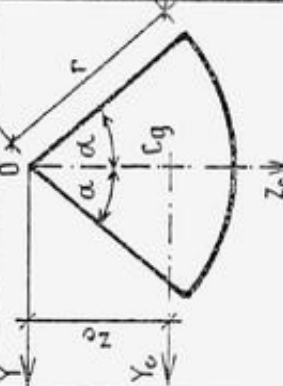
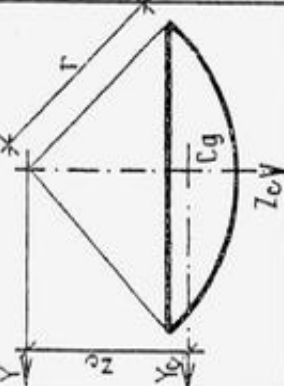
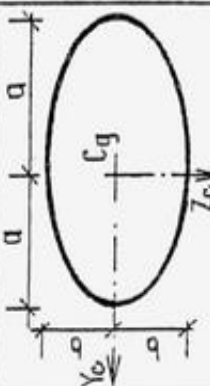


TVAR OBRAZCE	PLOCHA A	SOUBĚDNICE TĚŽIŠTĚ $C_g (y_c, z_c)$	AXIÁLNÍ MOMENTY SETRVAČNOSTI I	DEVIČNÍ MOMENTY D
	$A = \frac{bh}{3}$	$y_c = \frac{3}{4}b$  $z_c = \frac{3}{10}h$	$I_{y_c} = \frac{37}{2100}bh^3 \doteq 0,0176 bh^3$ $I_{z_c} = \frac{1}{80}hb^3 \doteq 0,0125 hb^3$ $I_y = \frac{1}{24}bh^3 \doteq 0,0476 bh^3$ $I_z = \frac{1}{5}hb^3 \doteq 0,2000 hb^3$ $I_{y'} = \frac{19}{105}bh^3 \doteq 0,1810 bh^3$ $I_{z'} = \frac{1}{30}hb^3 \doteq 0,0333 hb^3$	$D_{y_c z_c} = 0$
	$A = \frac{\pi r^2}{2} = \frac{\pi d^2}{8} \doteq 45708 r^2 = 0,3927 d^2$	$z_c = \frac{4r}{3\pi} = \frac{2d}{3\pi} \doteq 0,4244 r$	$I_{y_c} = \left(\frac{\pi}{8} - \frac{8}{9\pi}\right)r^4 \doteq 0,1098 r^4$ $I_z = I_y = \frac{\pi r^4}{8} = \frac{\pi d^4}{128} \doteq 0,3928 r^4 = 0,0246 d^4$	$D_{y_c z_c} = 0$
	$A = \frac{\pi r^2}{4} = \frac{\pi d^2}{16} \doteq 0,7854 r^2 = 0,1964 d^2$	$y_c = z_c = \frac{4r}{3\pi} = \frac{2d}{3\pi} \doteq 0,4244 r$	$I_{y_c} = I_{z_c} = \left(\frac{\pi}{16} - \frac{4}{9\pi}\right)r^4 = 0,0549 r^4$ $I_y = I_z = \frac{\pi r^4}{16} \doteq 0,1963 r^4$	$D_{y_c z_c} = \left(\frac{1}{8} - \frac{4}{9\pi}\right)r^4 \cdot r^4 = -0,0165 r^4$ $D_{yz} = \frac{r^4}{8}$ <b>ZNAMÉNKA!</b>
	$A = \widehat{\alpha} r^2 = \alpha r^2 \doteq 0,180^\circ \pi r^2$	$z_c = \frac{r}{\pi} \left( \frac{2\alpha + \sin 2\alpha}{2} - \frac{4 \sin^3 \alpha}{3\alpha} \right)$	$I_{y_c} = r^4 \left( \frac{2\alpha + \sin 2\alpha}{8} - \frac{4 \sin^3 \alpha}{9\alpha} \right)$ $I_{z_c} = \frac{r^4}{8} (2\alpha - \sin 2\alpha)$ $I_y = \frac{r^4}{8} (2\alpha + \sin 2\alpha)$	$D_{y_c z_c} = 0$
	$A = \frac{r^2}{2} (\alpha - \sin 2\alpha)$	$z_c = \frac{r}{\pi} \left( \frac{3(2\alpha - \sin 2\alpha)}{2 + \sin^2 \alpha} - \frac{4 \sin^3 \alpha}{\alpha} \right)$	$I_{y_c} = r^4 \left( \frac{4\alpha - \sin 4\alpha}{16} - \frac{4 \sin^3 \alpha}{9 \alpha - \sin 2\alpha} \right)$ $I_{z_c} = \frac{r^4}{48} (12\alpha - 8\sin 2\alpha + \sin 4\alpha)$ $I_y = \frac{r^4}{16} (4\alpha - \sin 4\alpha)$	$D_{y_c z_c} = 0$
	$A = \pi ab$		$I_{y_c} = \frac{\pi}{4} ab^3$ $I_{z_c} = \frac{\pi}{4} b a^3$	$D_{y_c z_c} = 0$

GEOMETRICKÉ CHARAKTERISTIKY ROVINNÝCH OBRAZCŮ TABULKA 3.

TVAR OBRAZCE	PLOCHA A	SOUŘADNICE TÉŽIŠTĚ $C_g(y_c, z_c)$	AXIÁLNÍ MOMENTY SETRVAČNOSTI I	DEVIČNÍ MOMENTY D
	$A = bh$	$y_c = \frac{b}{2}$ $z_c = \frac{h}{2}$	$I_{y_c} = \frac{bh^3}{12}$ , $I_{z_c} = \frac{hb^3}{12}$ $I_y = \frac{bh^3}{3}$ , $I_z = \frac{hb^3}{3}$	$D_{yz} = \frac{b^2 h^2}{4}$ $D_{y_c z_c} = 0$
	$A = \frac{bh}{2}$	$z_c = \frac{h}{3}$	$I_{y_c} = \frac{bh^3}{36}$ , $I_{z_c} = \frac{hb^3}{48}$ $I_y = \frac{bh^3}{12}$ $I_{y'} = \frac{bh^3}{4}$	$D_{y_c z_c} = 0$
	$A = \frac{bh}{2}$	$z_c = \frac{h}{3}$	$I_{y_c} = \frac{bh^3}{36}$ , $I_{z_c} = \frac{hb^3}{36}$ $I_y = \frac{bh^3}{12}$ , $I_z = \frac{hb^3}{12}$ $I_{y'} = \frac{bh^3}{4}$	$D_{y_c z_c} = -\frac{b^2 h^2}{12}$ $D_{yz} = \frac{b^2 h^2}{24}$ $D_{y' z'} = -\frac{b^2 h^2}{8}$ ZNAMÉNKA!
	$A = \pi r^2 = \frac{\alpha d^2}{4} = 3,1416 r^2 = 0,7854 d^2$		$I_{y_c} = I_{z_c} = \frac{\pi r^4}{4} = \frac{\pi d^4}{64} = 0,7854 r^4 = 0,0491 d^4$	$D_{y_c z_c} = 0$
	$A = \frac{2}{3} bh$	$y_c = \frac{3}{8} b$ $z_c = \frac{2}{5} h$	$I_{y_c} = \frac{8}{175} bh^3 = 0,0457 bh^3$ $I_{z_c} = \frac{19}{480} hb^3 = 0,0396 hb^3$ $I_y = \frac{16}{105} bh^3 = 0,1524 bh^3$ $I_z = \frac{2}{15} hb^3 = 0,1333 hb^3$ $I_{y'} = \frac{2}{7} bh^3 = 0,2857 bh^3$ $I_{z'} = \frac{3}{10} hb^3 = 0,3000 hb^3$	