

Page	line number	column	Old	New
14	7	1	x'-t'	x', t'
14	18	2	p _j	p _i
14	18	2	of a molecule	of molecule <i>i</i>
20	20		μ and substitute into Eq. 2.4.4. Diving by N and rearranging	μ, form intensive properties E/N, S/N, and V/N, differentiate, and employ Eq. 2.6.1. Rearranging
22	13		(-T	(+T
22	14		[1+T	[1-T
26	12	2	650 Btu/lb _m	650 Btu/lb _m
26	12	2	630 Btu/lb _m	630 Btu/lb _m
28	14		3.1 INDEX NOTATION RULES	3.1 INDEX NOTATION RULES AND COORDINATE ROTATION
32	8		CONSINES	COSINES
49	Fig. 3.6; top line		$\frac{\partial t}{\partial t} dt$	$\frac{\partial f}{\partial t} dt$
54	11		attempted	attempted (however see 20.16)
59	13		v _k ,	v _k ,
59	23		c x ₁ ,	c x ₁ ,
59	23		c x ₂ ,	c x ₂ ,
70	10	1	= v ₀	= $\frac{2}{3}v_0$
70	11		maximum	average

70	6	2	the velocity	the vortex velocity
70	10	2	two-dimensional flow given	two-dimensional flow from a line source; given
70	19	2	are constants)	are constants):
73	2		No Eq. #	(5.1.4)
81	32		No Eq #	(5.7.3)
87	7		$F_i = g_i Z$	$F_i = -g_i Z$
95	9		$\rho g A_a$	$\rho_1 g A_1$
103	36	1	rest, the density	rest, prove that the density
103	32	2	325 kPa	425 kPa
104	4	1	parameters.	parameters. Ignore gravity.
104	15	1	space but	space, but
104	16	1	time, the	time. The
104	26	1	dSW	dS
104	27	1	$\int_{VR \text{ fluid}} \rho F_i dV$	$\int_{VR} \rho F_i dV$
104	1	2	5.12	5.13
104	4	2	the height	the differential equation for the height
104	17	2	container?	container? Assume dh/dt = 0.
106	23		0), as	0) as
106	23		size	side
111	22		wit the	with the
118	10		we an	we can
119	24		5.7.6	5.7.14
120	26	1	fluid constant	fluid with constant

120	26	26-28	6.8 equation	delete all 6.8
123	16		∂_y	∂y
123	fig. 7.2(b)		τ_{yz}	τ_{yx}
127	20		areas where the control region cuts	areas cutting
127	21		and regions cutting fluid areas. The	and areas cutting fluid regions.¶ The
127	25		rotating or translating shaft	translating or rotating shaft
127	27		time insert	time we insert
127	30		fixed region this is zero.	fixed region boundary work is, of course, zero.
128	6		work concept. Flow	work concept. ¶ Flow
129	7		Let the velocity	Let the average velocity
137	Fig. 7.8		Arrow pointing wrong way	reverse arrow
138	4		change in	changes in
139	Fig. 7.9		v_x in (a) and (b)	v_x
144	7	1	$T_{z\theta} = r T_0$	$\tau_{z\theta} = r \tau_0$
144	7.18		oil	SAE 30 oil
144	7.18		has a viscosity of 300,000cs (100cs/cm ² sec)	has a kinematic viscosity of 300 centistokes (10 ⁻⁶ centistokes/ (m ² /s)
146	5	2	size	size of
149	10		shelf full.	shelf full of books.
153	1		p_o	p
168	4		conditions. the	conditions. The
169	3		sale	scale
169	11		characterics is	characteristic is

169	17		case. the	case. The
173	1		L^2	h^2
173	27		under	are the basis for
174	21	1	1.75 ft	175 ft
174	5	2	What is in terms	What is in terms
174	17	2	viscosity. and	viscosity and
176	27		$\tau_{yx} = \tau_{xy}$	$\tau_{yx} = \tau_{xy}$
178	5		us one again	us once again
180	25	3	$V = U/a_0$	$U = u / a_0$
184	21		$d p^*$	$d \rho^*$
187	13	2	$p^* = (a^*)^\alpha$	$p^* = (\rho^*)^\alpha$
192	5		$\frac{p_s}{\rho v_0^2}$	$-\frac{p_s}{\rho v_0^2}$
193	9		*	* (no space)
193	17		$k * \delta_i T^*$	$k * \delta_i T^*$
198	3		with a constant	with an arbitrary constant
198	Fig 10.2		$p_{hyd} = -\rho g Z$	$p_{hyd} = -\rho g Z + p_{ref}$
199	17		Replace Eq. 10.5.5 with	$C_{pkin} = \frac{p_{kin} - p_{ref}}{\frac{1}{2} \rho v_o^2}$
202	Fig. 10.4		$\hat{p} = p -$	$\hat{p} = p +$
202	16	Eq. 10.7.7	Eq should be	$\hat{v}_0 + \hat{v}_j + \hat{v}_i + \hat{v}_j = -\frac{1}{\rho} \hat{p} + \hat{v}_i + \hat{v}_j$

203	26		incompressible	incompressible
204	8		eq. 10.8.5 $\frac{d}{d}$ (2 times)	-
204	19		$(k^* \partial_i \hat{T})$	$(k^* \partial_i^* \hat{T})$
204	22	Eq 10.8.9	$\frac{d}{d}$	$\frac{\partial}{\partial}$
205	8		int the category where simplified	into the category where the simplified
209	5	1	(B) the	(B) The
209	3	2	(p^*-1)	$(p^*-p_o^*)$
211			pressure	(kinetic) pressure
211	29		$\frac{y}{L}$	$\frac{x}{L}$
211	29		$\frac{z}{L}$	$\frac{y}{L}$
212	2		is	is (let be nondimensional)
213	5		$\frac{1}{(2(1+K))'}$	$\frac{1}{2(1+K)}$,
213	15		z	x
214	4		11.2.5	11.1.5
215	Eq11.2.4		\pm	\pm^2
215	3		\pm	\pm^2
215	3		-	$-^2$
215	3		Y	2Y

215	4		X	2X
216	24		${}_n y^*$	${}_m y^*$
217	16		${}_n y_i^*$	${}_m y_i^*$
218	1		${}_n y_i^*$	${}_m y_i^*$
229	30		of order 1.	of order one.
236	10		$x F(y)$	$x f(y)$
239	14		that the constant	that $=2$ and the constant
240	1		-1.2	-1/2
249	30	11.7	p k	p K
270	22	1	(A) Formulate	(A) Using the stream function formulate
270	22-23	1	equation boundary	equation and boundary
299	13.9		$\omega_i dV$	$\omega_i dV$ <small>AR</small>
299	11	2	by taking	by taking \mathbf{v}
299	20	2	(C)	(A)
299	22	2	13.13	13.12
299	23-24	2	and circulation $= -4\pi$	delete
299	33	2	r-z plane.	r-z plane. Use nondimensional variables.
312	24			
346	3	1	flow, plot	flow (fig. 14.24), plot
375	5	1	$\epsilon f + f = a$	$\epsilon f + f = a$

375	1	2		-
378	30		D t	D t*
395	19-20	2	flow boundary	flow and boundary
395	22-23	2	variable for r	variables for v and r
404	15	1	(C)	(A)
454	18		$(\zeta - \zeta_a)^0$	$(\zeta - \xi_a)^0$
462	21		$= \frac{\cosh(y + H)}{\sinh H}$	$= \frac{\cosh(y + H)}{\sinh H}$
466	16	2	(A)	(B)
473	29		whre	where
493	eq. 19.13.8		$\frac{U \hat{r} \cos \hat{\theta}}{2 r^2}$	$\frac{U \hat{r} \cos \hat{\theta}}{2 r^3}$
496-497			$\hat{U} \hat{x}$	$\hat{U} \hat{x}_1$
496	prob 1		add	Using software one can also plot v, C _p , and streamlines
496	prob 5		A flat plate is	A flat disk with added mass $\frac{8}{3} \rho r_0^3$
569	prob 20.8		$\beta (1 - f)$	$\beta (1 - f^2)$
569	prob 20.9		tanh	tanh ²
569	29	1	computer	compute

569	31	1	computer	compute
577	1		work dissipation	work-dissipation
613	13		chapter 11	chapter 21
615	21		equation,	equation
615	21-22		. we can write Eq. 21.1.5. in terms of Q and h and eliminate dp/dx. The	we can write the
615	22		L is	L as
615			inserting h_0 ,	inserting h_0 and L ,
623	eq. 22.17		$(p...$ $\mu...$	$(p...$ $12 \mu...$
627	6		The pressure	Pressure
656	16		temper	temperature
662	7		T^1	T^i
665	14		surface with no	surface containing no
690	4		800 to 100	800 to 1000
690	20		Hok	Hak
702	6		position	position, $y = y'$
702	Eq 25.3.2		$F(x, y, z, t) = y - f(x, z, t)$	$0 = F(x, y, z, t) = y - f(x, z, t)$ or $y = f(x, z, t)$
702	7		w,	\mathbf{w}
702	eq25.2.5		$w \cdot F$	$\mathbf{w} \cdot F$
702	12		velocity w	velocity \mathbf{w}
702	12		Eq. 23.1.5	Eq. 25.2.4 (23.1.5)
702	7		$w =$	$\mathbf{w} =$
702	14		v_1 and Eq. 25.2.6 becomes	\mathbf{v}_1 and Eq. 25.2.5 becomes (subscript 1

				is for side 1, $\mathbf{v}_1 = (u_1, v_1, w_1)$
708	7		$c_1 = c_1$	$c_1 = c_1$
751	Eq. 26.9.4		$k = \frac{1}{2} \overline{u_i u_i}$	$k = \frac{1}{2} \overline{u_i u_i} = \frac{1}{2} \overline{q^2}$ where $q^2 = u_i u_i$
755	7		Kilmogorov	Kolmogorov
756	4			
758	eq. 26.11.9		$\frac{u_*}{U}$	$\frac{u_*}{U_0}$
759	eq. 26.11.14		$\left[\frac{1}{2} \overline{v(uu + vv + ww)} \right]$	$\left[\frac{1}{2} \overline{v(uu + vv + ww)} \right]$