Index for Workbook 29

Area theorem	_ 75	, 76	Magnetic field	27, 29
			Magnetic flux	43
Conservative vector field				
Current continuing equation			Ohm's law	47
Current in line	_ 29	, 67		
Current in loop		_ 27	Pythagoras' theorem	37
Cylinder		_ 68		
Cylindrical polar coordinates	_ 45	, 57	Scalar line integral	
			Scalar product	7
Divergence theorem - See Gauss			Stokes' theorem	55-60
Electric current		46	Surface integrals	. 35-57
Electric field 19, 63			11.35	0.5
Electric motor			Unit normal	35
			V/ 1	F0 F0
Field strength	_ 67	, 68	Volume integrals	. 59-53
Gauss' law	63	65	Work	19
Gauss' theorem				
Green's theorem			EXERCISES	
dicen's theorem	′ 1	L-11	16, 23, 33, 41, 49, 51, 53, 60, 70	, 77
Integral vector theorems			ENCINEEDING EVANDLES	
- Gauss'	61	L-70	ENGINEERING EXAMPLES	
- Green's	71	L-77	1 Work done moving a charge in	
- Stokes'	55	5-60	electric field	
Integrating			2 Force on a loop from an electric	
- scalar field		_ 37	field	
- vector field		41	3 Magnetic field from a current li	
			4 Magnetic flux	43
Lightning strike		_ 46	5 The current continuity equation	
Line integrals			6 Gauss' law	63
scalar products		7	7 Field strength around a charged	
- vector		_ 24	line	67
Lorentz force		_ 27	8 Field strength on a cylinder	68