

# Self-Assessment Results

## Unified Engineering, Fall '03

### 75 Respondents

- 1 Poor understanding, or never heard of the concept
- 2 Weak understanding, probably couldn't apply it properly
- 3 OK understanding, could apply it with considerable effort
- 4 Good understanding, could apply it with little or no trouble
- 5 Excellent understanding, almost second nature

TOPIC OR CONCEPT	class fraction				
	1	2	3	4	5
Equation of state for a perfect gas	0.01	0.03	0.03	0.12	0.12
Fluid viscosity	0.03	0.06	0.06	0.03	0.01
Vector addition and subtraction	0.01	0.01	0.01	0.06	0.12
Scalar (Dot) product of two vectors	0.01	0.01	0.01	0.06	0.12
Vector (Cross) product of two vectors	0.01	0.01	0.01	0.06	0.12
Vector relations in polar coordinates	0.01	0.03	0.06	0.06	0.01
Rotation of vectors between different coordinate systems	0.01	0.03	0.06	0.06	0.01
Normal and tangential vectors on surface	0.01	0.03	0.06	0.06	0.01
Gradient of a scalar field	0.01	0.03	0.06	0.06	0.01
Divergence of a vector field	0.01	0.03	0.06	0.06	0.01
Curl of a vector field	0.01	0.03	0.06	0.06	0.01
Stokes Theorem	0.01	0.03	0.06	0.06	0.01
Gauss (Divergence) Theorem	0.01	0.03	0.06	0.06	0.01
Gradient Theorem	0.01	0.03	0.06	0.06	0.01
Line, Surface, Volume integrals	0.01	0.03	0.06	0.06	0.01
Conservation of mass	0.01	0.03	0.06	0.06	0.01
Conservation of linear momentum	0.01	0.03	0.06	0.06	0.01
Conservation of angular momentum	0.01	0.03	0.06	0.06	0.01