

Answers to even numbered exam 1 review problems

P. 813:

6. $\mathbf{u} = \pm \frac{1}{\sqrt{54}}(7\mathbf{i} + 2\mathbf{j} - \mathbf{k}).$

10. 6.

12. 87.

P. 446:

4. $\frac{32}{3}.$

8. $\frac{117\pi}{5}.$

10. $256\pi.$

16. (a) $\frac{5}{12}.$ (b) $\frac{41\pi}{105}.$ (c) $\frac{13\pi}{30}.$

30. $\frac{1}{20}(1 - \cos(100)).$

P. 465:

2. $\frac{\sin^7 x}{7} - \frac{\sin^9 x}{9} + C.$

4. $\frac{8}{15}.$

30. $\frac{981}{20}.$