

## Answers to Week 3 Week in Review

### Section 6.2-6.3

1.  $\frac{1}{3}hs^2$

2.  $\frac{4\sqrt{3}}{3}$

3.  $8\pi$

4.  $\frac{40\pi}{3}$

5.  $\frac{5\pi}{2} + 2\pi e^2 + \frac{3}{2}\pi e^4$

6.  $\int_0^2 2\pi y ((8 - 2y^2) - (4 - y^2)) dy$

### Section 6.4

1. 40 J

2. 160 J

3. 14700 J

4. 19600 J

5.  $58800\pi + 313600$  J

6. 20800 ft-lbs