

Answers for the last homework. Ripped straight from the solutions manual. If you want more details on a specific problem, please email me.

16.7

2: $18\pi \approx 56.5$

4: -80π

8: $\frac{4}{105} (9\sqrt{3} + 4\sqrt{2} - 2)$

16: 241π

17: $\frac{5}{48}\sqrt{5} + \frac{1}{240}$

24: 0

27: 48

16.8

2: 0

6: 0

8: $2e - 4$

10: 0

14: 0

18: π

16.9

2: a) P_1 is a source. P_2 is a sink.

b) $\text{div}\mathbf{F} = 1 + 2y$, confirming a)

6: 4π

8: 0

15: 0

20: $\frac{\pi}{2}$

22: $\frac{4}{3}\pi$

28: You have the answer. The problem is showing they're equal.

29: Again, the problem is in confirming the equal signs are true.