

Ponovljeni drugi međuispit iz Matematike 3E
28.01.2011.

1. (4 boda)

$$\int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} d\varphi \int_0^{2 \cos \varphi} f(r, \varphi) r dr,$$
$$\int_0^2 r dr \int_{-\arccos \frac{r}{2}}^{\arccos \frac{r}{2}} f(r, \varphi) d\varphi.$$

2. (4 boda)

$$P = \pi.$$

3. (5 bodova)

$$\int_{\frac{1}{2}}^{\frac{2}{3}} dv \int_0^{\frac{1}{1-v}} f(u - uv, uv) u du.$$

b) Vidi knjigu.

4. (4 boda)

$$\frac{8}{9}a^2.$$

5. (3 boda)

$$\frac{8\pi}{9} (2\sqrt{2} - 1).$$

6. (5 bodova)