SOAL **INTEGRAL LIPAT DUA (*DOUBLE INTEGRAL*)**

1. $\iint_D \frac{xy}{\sqrt{x^2+y^2+1}}\,dA \;;\; D=\{(x,y)|0\le x\le 1\;;\;0\le y\le 1\}$

2. $\iint_D (x\sin y - y\sin x)\,dA \;;\; D=\left\{(x,y)|0\le x\le \frac{\pi}{2}\;;\;0\le y\le \frac{\pi}{3}\right\}$

3. $\int_{\sqrt{\pi}}^{\sqrt{2\pi}} \int_0^{x^3} \sin\frac{y}{x}\,dy\,dx$

4. $\int_1^2 \int_0^{y^2} e^{\frac{x}{y^2}}\,dx\,dy$

5. $\iint_R (x+y)\,dA$; R dibatasi $y=x^2$, $y=\sqrt{x}$

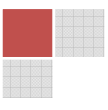
6. $\int_1^3 \int_0^{\ln x} x\,dy\,dx$

7. $\int_0^1 \int_{2x}^2 e^{y^2}\,dy\,dx$

8. $\int_0^8 \int_{\sqrt[3]{y}}^2 \frac{y}{\sqrt{16+x^7}}\,dx\,dy$

9. $\int_0^9 \int_{\sqrt{y}}^3 \sin x^3\,dx\,dy$

10. $\int_0^1 \int_x^1 \frac{1}{y}\sin y\,\cos\frac{x}{y}\,dy\,dx$



KUNCI JAWABAN SOAL **INTEGRAL LIPAT DUA (*DOUBLE INTEGRAL*)**

1. $\frac{1}{3}\left(3\sqrt{3}+1-4\sqrt{2}\right)$
2. $\frac{1}{16}\pi^2-\frac{\pi}{3}$
3. $\frac{\pi}{3}$
4. $\frac{1}{2}(e-1)$
5. $\frac{3}{10}$
6. $\frac{9\ln 3-4}{2}$
7. $\frac{1}{4}(e^4-1)$
8. $\frac{8}{7}$
9. $\frac{1}{3}(1-\cos 27^o)$
10. $\sin 1^o\,(1-\cos 1^o)$

PLEASE CORRECT IF YOU GET THE WRONG IN MY ANSWER, THANKS