

## Круглов Иван 1.2

### ЛР 3.2

--> a=3, b=9

a=3

b=9

--> I=1/3\*(2\*b-1)^(3/2)-1/3\*(2\*a-1)^(3/2)

I=19.637485

--> x=a:b;y=sqrt(2\*x-1)

y=2.236068 2.6457513 3. 3.3166248 3.6055513 3.8729833 4.1231056

--> inttrap(x,y)

ans = 19.620498

--> h=1; x=a:h:b; y=sqrt(3\*x-1)

y = 2.8284271 3.3166248 3.7416574 4.1231056 4.472136 4.7958315 5.0990195

--> inttrap(x,y)

ans = 24.413079

--> x=a:b;y=sqrt(2\*x-1)

y = 2.236068 2.6457513 3.3166248 3.6055513 3.8729833 4.1231056

--> inttrap(y)

ans = 19.620498

--> h=0.1;x=a:h:b;y=sqrt(3\*x-1)

y = column 1 to 13

2.8284271 2.8809721 2.9325757 2.9832868 3.0331502 3.082207 3.1304952 3.1780497 3.2249031 3.2710854 3.3166248 3.3615473 3.4058773

column 14 to 26

3.4496377 3.4928498 3.5355339 3.5777088 3.6193922 3.660601 3.7013511 3.7416574 3.7815341 3.8209946 3.8600518 3.8987177 3.9370039

column 27 to 39

3.9749214 4.0124805 4.0496913 4.0865633 4.1231056 4.1593269 4.195  
2354 4.2308392 4.2661458 4.3011626 4.3358967 4.3703547 4.4045431

column 40 to 52

4.4384682 4.472136 4.5055521 4.5387223 4.5716518 4.6043458 4.6368  
092 4.669047 4.7010637 4.7328638 4.7644517 4.7958315 4.8270074

column 53 to 61

4.8579831 4.8887626 4.9193496 4.9497475 4.9799598 5.00999 5.03984  
13 5.0695167 5.0990195

--> inttrap(y)

ans = 244.3249

--> integrate('(3\*x-1)^0.5','x',3,9)

ans = 24.432687