$$assume(x,'real');$$

$$fx := evalf\left(\frac{\exp\left(-\frac{(x-4.0)\cdot\cdot 2}{2.0\cdot 0.5\cdot\cdot 2}\right)}{\mathrm{sqrt}\left(2.0\cdot\pi\cdot 0.5\cdot\cdot 2\right)}\right); int(fx, x=0..8); int(x\cdot fx, x=-3..11); int((x-4)\cdot\cdot 2\cdot fx, x=-7..11); int(fx, x=4-0.5..4+0.5);$$

$$0.7978845605\, e^{-2.000000000\,(x\sim-4.0)^2}$$

$$0.9999999996$$

$$3.999999998$$

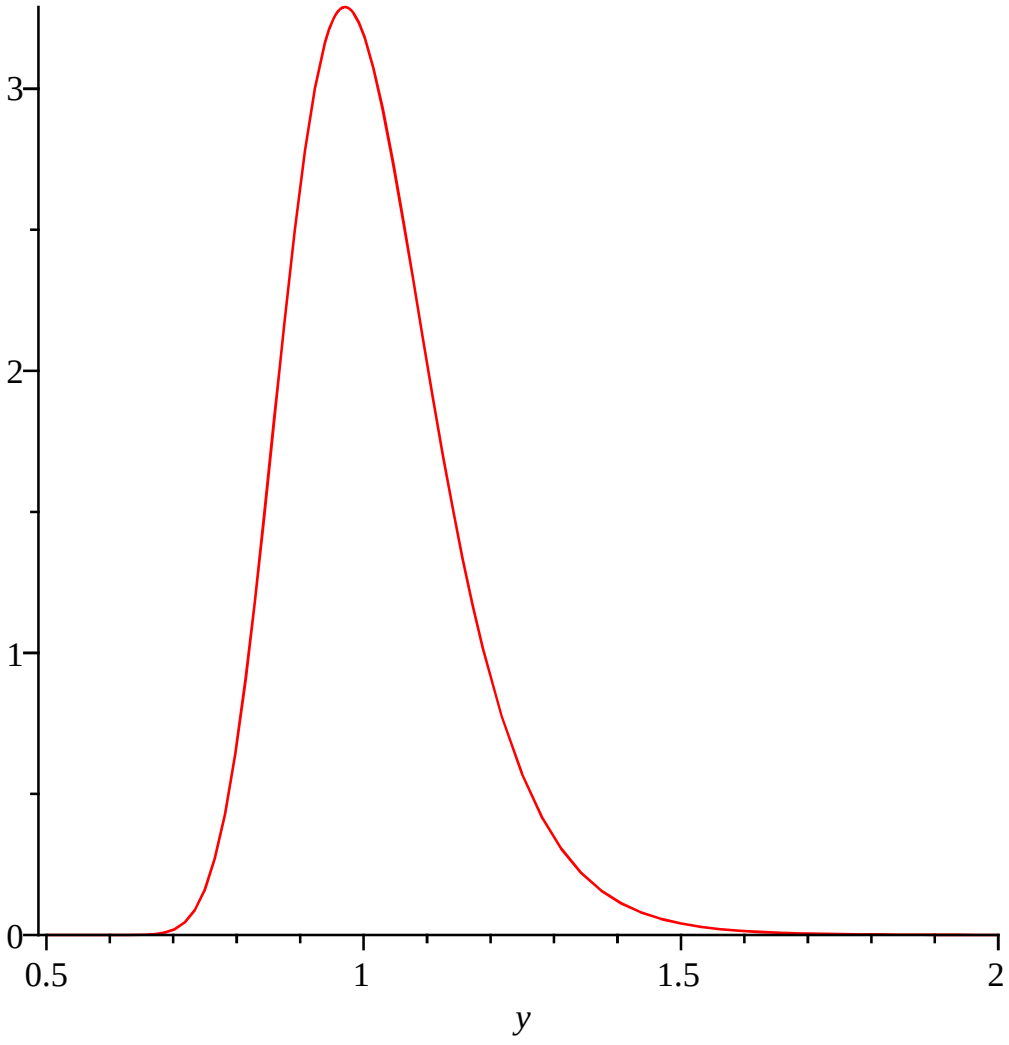
$$0.2499999999$$

$$0.6826894919 \qquad \textbf{(1)}$$

$$g := evalf\left(int\left(fx\cdot \mathrm{Dirac}\left(y-\frac{4.0}{x}\right), x=-\infty..\infty\right)\right);$$

$$\int_{-Float(\infty)}^{Float(\infty)} 0.7978845605\, e^{-2.000000000\,(x\sim-4.0)^2}\, \mathrm{Dirac}\left(y-\frac{4.0}{x\sim}\right) dx\sim \qquad \textbf{(2)}$$

$$plot(g, y=0.5..2);$$



$$y \qquad \textbf{(3)}$$

$$int(1.000001 \cdot g, y = 0.5 \,..\, 2.0);$$

0.9999693283 **(4)**

$$int(y \cdot g, y = 0.5 \,..\, 2.0);$$

1.016354594 **(5)**

$$\text{sqrt}(int((y - 1) \cdot\cdot 2 \cdot g, y = 0.5 \,..\, 2.0));$$

0.1346159462 **(6)**

$$\frac{4.}{(4. + 0.5)} - 1.; \frac{4.}{(4. - 0.5)} - 1.;$$

-0.1111111111

0.142857143 **(7)**

$$int(1.000001 \cdot g, y = 1 - 0.11111 \,..\, 1 + 0.142857);$$

0.6826872407 **(8)**

$$fp := fopen(\text{"e:/tmp.dat"}, WRITE);$$

0 **(9)**

for *i* **from** 0 **to** 100 **do** $y := i \cdot 0.05 + 0.000001$; *fprintf* (*fp*, " %lf %lf \n", *y*, $1.000001 \cdot g$) :**end do**;
fclose(*fp*);