```
> fq := piecewise(p < -5, 0.,
                  p < -3, 0.161711971*(p+5.)^3,
                  p < -1, -1.798464149*p^2-0.544033315*p+7.541565235-0.3076373305*p^3,
                  p < 1, 0.0809338641*p^3-0.6327505649*p^2+0.6216802691*p+7.930136430,
                  p < 3, 0.07445052690*p^3-0.613300552*p^2+0.602230257*p+7.936619768,
                  p < 5, 0.0019182821*p^3+0.039489651*p^2-1.35614035*p+9.894990378,
                  p < 7, -0.00256603524*p^3+0.106754411*p^2-1.69246414*p+10.45553002,
                  p < 9, -0.00254356370*p^3+0.106282509*p^2-1.68916084*p+10.44782231,
                  p < 11, -0.02031067084*p^3+0.585994401*p^2-6.00656786*p+23.40004343,
                  p < 13, 0.04137545813*p^3-1.449647855*p^2+16.38549696*p-58.70419431,
                  p < 15, -0.0273325019*(p-15.)^3,
                  15 <= p, 0.):
> m := piecewise(1 <= p <= 9, fq)
```

$$m := \begin{cases} \begin{cases} 0. & p < -5 \\ 0.161711971\ (p+5.)^3 & p < -3 \\ -1.798464149\,p^2 - 0.544033315\,p + 7.541565235 - 0.3076373305\,p^3 & p < -1 \\ 0.0809338641\,p^3 - 0.6327505649\,p^2 + 0.6216802691\,p + 7.930136430 & p < 1 \\ 0.07445052690\,p^3 - 0.613300552\,p^2 + 0.602230257\,p + 7.936619768 & p < 3 \\ 0.0019182821\,p^3 + 0.039489651\,p^2 - 1.35614035\,p + 9.894990378 & p < 5 \\ -0.00256603524\,p^3 + 0.106754411\,p^2 - 1.69246414\,p + 10.45553002 & p < 7 \\ -0.00254356370\,p^3 + 0.106282509\,p^2 - 1.68916084\,p + 10.44782231 & p < 9 \\ -0.02031067084\,p^3 + 0.585994401\,p^2 - 6.00656786\,p + 23.40004343 & p < 11 \\ 0.04137545813\,p^3 - 1.449647855\,p^2 + 16.38549696\,p - 58.70419431 & p < 13 \\ -0.0273325019\,(p-15.)^3 & p < 15 \\ 0. & 15 \le p \end{cases} & 1 \le p \text{ and } p \\ 0 & \text{otherwise} \end{cases}$$

```
> # Approach using convert
> f := convert(fq, pwlist)
```

$$f := [0., -5, 0.161711971\ (p+5.)^3, -3, -1.798464149\,p^2 - 0.544033315\,p + 7.541565235 - 0.3076373305\,p^3, -1, 0.0809338641\,p^3 - 0.6327505649\,p^2 + 0.6216802691\,p + 7.930136430, 1, 0.07445052690\,p^3 - 0.613300552\,p^2 + 0.602230257\,p \quad \textbf{(2)}$$

$$+ 7.936619768,\ 3,\ 0.0019182821\,p^3 + 0.039489651\,p^2 - 1.35614035\,p + 9.894990378,$$
$$5,\ -0.00256603524\,p^3 + 0.106754411\,p^2 - 1.69246414\,p + 10.45553002,\ 7,$$
$$-0.00254356370\,p^3 + 0.106282509\,p^2 - 1.68916084\,p + 10.44782231,\ 9,$$
$$-0.02031067084\,p^3 + 0.585994401\,p^2 - 6.00656786\,p + 23.40004343,\ 11,$$
$$0.04137545813\,p^3 - 1.449647855\,p^2 + 16.38549696\,p - 58.70419431,\ 13,$$
$$-0.0273325019\,(p - 15.)^3,\ 15,\ 0.\Big]$$

> $m := piecewise(1 \le p \le 3, f[9], 3 \le p \le 5, f[11], 5 \le p \le 7, f[13], 7 \le p \le 9, f[15])$

$m :=$ **(3)**

$$\begin{cases} 0.07445052690\,p^3 - 0.613300552\,p^2 + 0.602230257\,p + 7.936619768 & 1 \le p \text{ and } p \le 3 \\ 0.0019182821\,p^3 + 0.039489651\,p^2 - 1.35614035\,p + 9.894990378 & 3 \le p \text{ and } p \le 5 \\ -0.00256603524\,p^3 + 0.106754411\,p^2 - 1.69246414\,p + 10.45553002 & 5 \le p \text{ and } p \le 7 \\ -0.00254356370\,p^3 + 0.106282509\,p^2 - 1.68916084\,p + 10.44782231 & 7 \le p \text{ and } p \le 9 \end{cases}$$

> # ***Approach using op***

> $m := piecewise(1 \le p \le 3, op(10, fq), 3 \le p \le 5, op(12, fq), 5 \le p \le 7, op(14, fq), 7 \le p \le 9, op(16, fq))$

$m :=$ **(4)**

$$\begin{cases} 0.07445052690\,p^3 - 0.613300552\,p^2 + 0.602230257\,p + 7.936619768 & 1 \le p \text{ and } p \le 3 \\ 0.0019182821\,p^3 + 0.039489651\,p^2 - 1.35614035\,p + 9.894990378 & 3 \le p \text{ and } p \le 5 \\ -0.00256603524\,p^3 + 0.106754411\,p^2 - 1.69246414\,p + 10.45553002 & 5 \le p \text{ and } p \le 7 \\ -0.00254356370\,p^3 + 0.106282509\,p^2 - 1.68916084\,p + 10.44782231 & 7 \le p \text{ and } p \le 9 \end{cases}$$

>