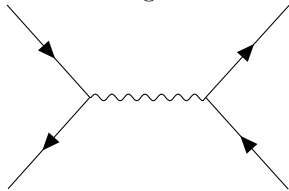the first diagram:

the second diagram:

k

p_1 p_2

the 3 diagram:

e^- μ^-

γ

k

e^+ μ^+

the 4 diagram:

e^- μ^-

γ

k

e^+ μ^+
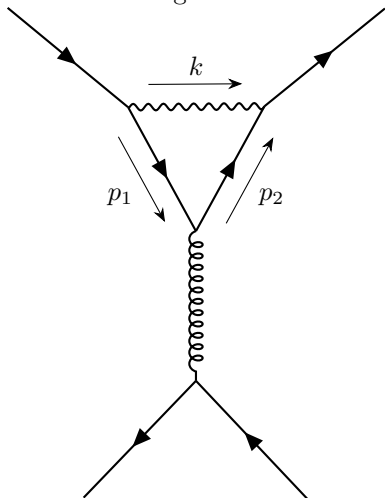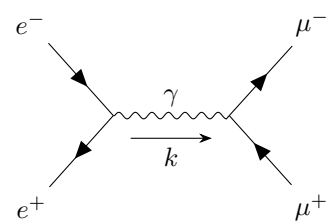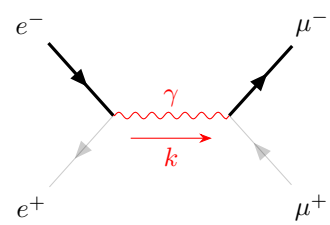
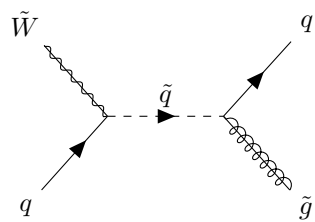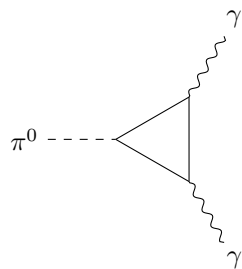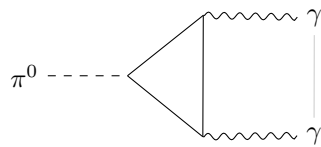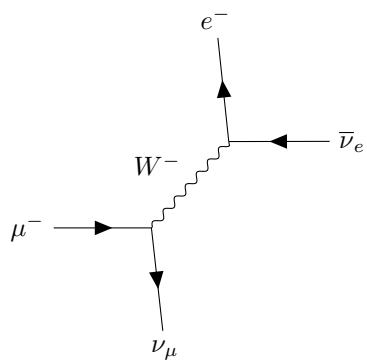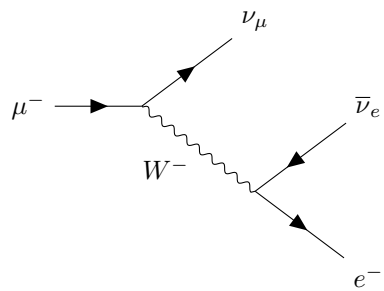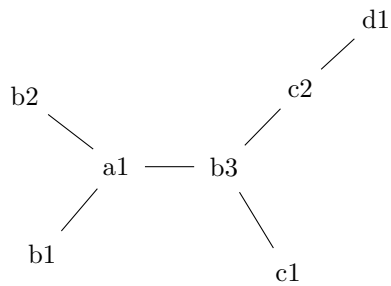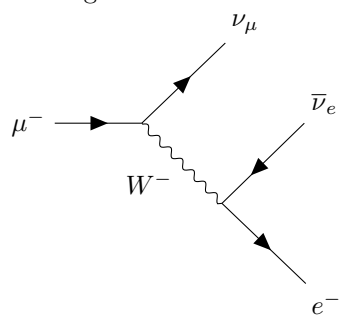the 5 diagram:

the 6 diagram:

the 7 diagram:

the 8 diagram:

the 9 diagram:

ν_μ

μ^-

$\overline{\nu}_e$

W^-

e^-

the diagram 11:

ν_μ

μ^-

$\overline{\nu}_e$

W^-

e^-

d1

b2

c2

a1 — b3

b1

c1

the diagram 12:

3