

completare la tabella sulle parabole usando solo i dati in grassetto

	Equazione	Direttrice	Fuoco	Vertice	Asse di simmetria
1	$y = \frac{4x^2}{5} - x + \frac{5}{6}$	$y = \frac{5}{24}$	$F\left(\frac{5}{8}, \frac{5}{6}\right)$	$V\left(\frac{5}{8}, \frac{25}{48}\right)$	$x = \frac{5}{8}$
2	$x = -\frac{2y^2}{3} - \frac{y}{3} + 3$	$x = \frac{41}{12}$	$F\left(\frac{8}{3}, -\frac{1}{4}\right)$	$V\left(\frac{73}{24}, -\frac{1}{4}\right)$	$y = -\frac{1}{4}$
3	$y = x^2 + x - 6$	$y = -\frac{13}{2}$	$F\left(-\frac{1}{2}, -6\right)$	$V\left(-\frac{1}{2}, -\frac{25}{4}\right)$	$x = -\frac{1}{2}$
4	$x = y^2 + y + 6$	$x = -\frac{13}{2}$	$F\left(-6, -\frac{1}{2}\right)$	$V\left(-\frac{25}{4}, -\frac{1}{2}\right)$	$y = -\frac{1}{2}$
5	$y = -(3x^2 + x + 10)$	$y = -\frac{59}{6}$	$F\left(-\frac{1}{6}, -10\right)$	$V\left(-\frac{1}{6}, -\frac{119}{12}\right)$	$x = -\frac{1}{6}$
6	$y = 1 - \left(\frac{x}{3} + \frac{1}{2}\right)^2$	$y = \frac{13}{4}$	$F\left(-\frac{3}{2}, -\frac{5}{4}\right)$	$V\left(-\frac{3}{2}, 1\right)$	$x = -\frac{3}{2}$
7	$y = -\frac{3x^2}{7} + 3x - 2$	$y = \frac{23}{6}$	$F\left(\frac{7}{2}, \frac{8}{3}\right)$	$V\left(\frac{7}{2}, \frac{13}{4}\right)$	$x = \frac{7}{2}$
8	$x = \frac{4y^2}{5} - y + \frac{5}{6}$	$x = \frac{5}{24}$	$F\left(\frac{5}{6}, \frac{5}{8}\right)$	$V\left(\frac{25}{48}, \frac{5}{8}\right)$	$y = \frac{5}{8}$
9	$y = -\left(\frac{x^2}{9} + 2x + \frac{1}{2}\right)$	$y = \frac{43}{4}$	$F\left(-9, \frac{25}{4}\right)$	$V\left(-9, \frac{17}{2}\right)$	$x = -9$
10	$y = -\frac{x^2}{4} + x - \frac{8}{9}$	$y = \frac{10}{9}$	$F\left(2, -\frac{8}{9}\right)$	$V\left(2, \frac{1}{9}\right)$	$x = 2$
11	$x = -(3y^2 + y + 10)$	$x = -\frac{59}{6}$	$F\left(-10, -\frac{1}{6}\right)$	$V\left(-\frac{119}{12}, -\frac{1}{6}\right)$	$y = -\frac{1}{6}$
12	$y = \frac{10x^2}{9} + \frac{4x}{9} - \frac{2}{5}$	$y = -\frac{241}{360}$	$F\left(-\frac{1}{5}, -\frac{79}{360}\right)$	$V\left(-\frac{1}{5}, -\frac{4}{9}\right)$	$x = -\frac{1}{5}$
13	$y = -\frac{x^2}{2} - \frac{3x}{4} + \frac{1}{2}$	$y = \frac{41}{32}$	$F\left(-\frac{3}{4}, \frac{9}{32}\right)$	$V\left(-\frac{3}{4}, \frac{25}{32}\right)$	$x = -\frac{3}{4}$
14	$x = \frac{8y^2}{9} - \frac{7y}{9} - \frac{7}{6}$	$x = -\frac{233}{144}$	$F\left(-\frac{19}{18}, \frac{7}{16}\right)$	$V\left(-\frac{385}{288}, \frac{7}{16}\right)$	$y = \frac{7}{16}$
15	$y = -\frac{x^2}{2} - 4x + \frac{9}{8}$	$y = \frac{77}{8}$	$F\left(-4, \frac{69}{8}\right)$	$V\left(-4, \frac{73}{8}\right)$	$x = -4$

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	Equazione	Centro	Raggio	Retta tangente	Punto di tangenza
16	$x^2 + y^2 + 3x - 15y + 28 = 0$	$C\left(-\frac{3}{2}, \frac{15}{2}\right)$	$\sqrt{\frac{61}{2}}$	$11x + y = 52$	$T(4, 8)$
17	$x^2 + y^2 + 8x + 6y = 0$	$C(-4, -3)$	5	$y + 8 = 0$	$T(-4, -8)$
18	$x^2 + y^2 + 11x - 11y + 52 = 0$	$C\left(-\frac{11}{2}, \frac{11}{2}\right)$	$\sqrt{\frac{17}{2}}$	$3x + 5y = -6$	$T(-7, 3)$
19	$x^2 + y^2 + 6x - 6y - 47 = 0$	$C(-3, 3)$	$\sqrt{65}$	$4x + 7y = 74$	$T(1, 10)$
20	$x^2 + y^2 + 12x + 2y + 17 = 0$	$C(-6, -1)$	$2\sqrt{5}$	$2x + y = -3$	$T(-2, 1)$
21	$x^2 + y^2 - 8x - 84 = 0$	$C(4, 0)$	10	$4x + 3y = -34$	$T(-4, -6)$
22	$x^2 + y^2 - 8x - 6y - 12 = 0$	$C(4, 3)$	$\sqrt{37}$	$6x - y = 58$	$T(10, 2)$
23	$x^2 + y^2 - \frac{25x}{3} - y + \frac{50}{3} = 0$	$C\left(\frac{25}{6}, \frac{1}{2}\right)$	$\frac{\sqrt{34}}{6}$	$15x - 9y = 41$	$T\left(\frac{10}{3}, 1\right)$
24	$x^2 + y^2 + 5x + \frac{11y+23}{2} = 0$	$C\left(-\frac{5}{2}, -\frac{11}{4}\right)$	$\frac{\sqrt{37}}{4}$	$12x + 2y = -17$	$T\left(-1, -\frac{5}{2}\right)$
25	$x^2 + y^2 + 6x - \frac{8y}{3} + 5 = 0$	$C\left(-3, \frac{4}{3}\right)$	$\frac{2\sqrt{13}}{3}$	$y - 18x = 12$	$T\left(-\frac{3}{5}, \frac{6}{5}\right)$
26	$x^2 + y^2 - \frac{5}{2}(x + y + 3) = 0$	$C\left(\frac{5}{4}, \frac{5}{4}\right)$	$\sqrt{\frac{85}{8}}$	$7x + 11y = -20$	$T\left(-\frac{1}{2}, -\frac{3}{2}\right)$
27	$x^2 + y^2 + \frac{x}{2} - \frac{7y}{2} - 6 = 0$	$C\left(-\frac{1}{4}, \frac{7}{4}\right)$	$\sqrt{\frac{73}{8}}$	$11x - 5y = 25$	$T\left(\frac{5}{2}, \frac{1}{2}\right)$
28	$x^2 + y^2 - \frac{23x}{3} - \frac{13y}{3} + 14 = 0$	$C\left(\frac{23}{6}, \frac{13}{6}\right)$	$\sqrt{\frac{97}{18}}$	$39x + 15y = 85$	$T\left(\frac{5}{3}, \frac{4}{3}\right)$
29	$x^2 + y^2 - 4x - 3y - 10 = 0$	$C\left(2, \frac{3}{2}\right)$	$\frac{\sqrt{65}}{2}$	$14x + 8y = -25$	$T\left(-\frac{3}{2}, -\frac{1}{2}\right)$
30	$x^2 + y^2 + \frac{17x}{2} - \frac{7y}{2} + 13 = 0$	$C\left(-\frac{17}{4}, \frac{7}{4}\right)$	$\sqrt{\frac{65}{8}}$	$7x - 9y = -13$	$T\left(-\frac{5}{2}, -\frac{1}{2}\right)$