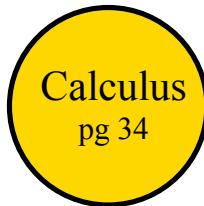


1) Trigonometric (sin or cos) 2) Quadratic 3) Can't tell 4) Linear

6) a: not linear
b: poor experiment
or skewed data or
non-linear relationship



8) a) $y = 9.7x + 0.4$
b) well-connected
c) 24.65 m/s

10) a) $y = -0.332x + 612.933$
b) well-connected
c) 446.790

12) $S = 180.893x^2 - 205.786x + 272$
c) 583.98 lbs

15) $y = -1.806x^3 + 14.583x^2 + 16.389x + 10$
c) ≈ 214 horsepower

16) $T = 2.986 \times 10^{-4}p^3 - 0.064p^2 + 5.283x + 143.101$
c) 68.148

d) It gets too high too fast and there is no data to confirm
such a fast increase.

18) $S(t) = 56.37 + 25.47\sin(0.508t - 2.07)$

d) 83.70°F for Miami, 56.37°F for Syracuse

e) about 1 year. f) Syracuse has greater amplitude. (25.47)