

11/12/17 #12-27

12) Quadratic

13) Quadratic

14) Not quadratic

15) $f(x) = \frac{4}{3}x^2 - x - \frac{7}{3}$

16) $f(x) = x^2 - 6x + 7$

17) $f(x) = 0.5x^2 - 3x - 8$

18) $f(x) = 3x^2 + 0.8x + 0.4$

19) $y = -3.7x^2 + 216x + 781$
about \$3.29 billion

20) $C(r) = 2\pi r \rightarrow$ linear

21) $A(b) = \frac{1}{2}bh \rightarrow$ linear

22) $P(t) = 2^t \rightarrow$ neither

23) $A(s) = s^2 \rightarrow$ quadratic

1) a) Galileo's Rule

b) Aristotle's Rule \rightarrow linear

da Vinci's Rule \rightarrow quadratic

Galileo's Rule \rightarrow quadratic

c) da Vinci's 2nd difference is 1 while Galileo's Rule has 2nd differences of 2

d) Galileo's Rule

25) -3

26) -2

27) -1