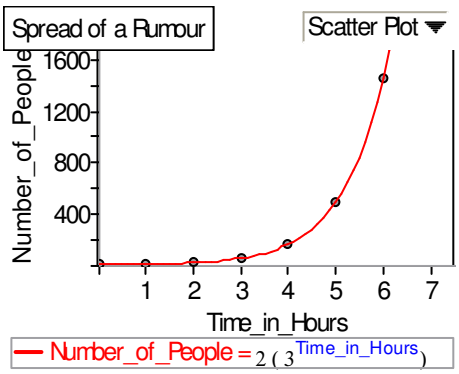
Domain and Range *for* All Functions

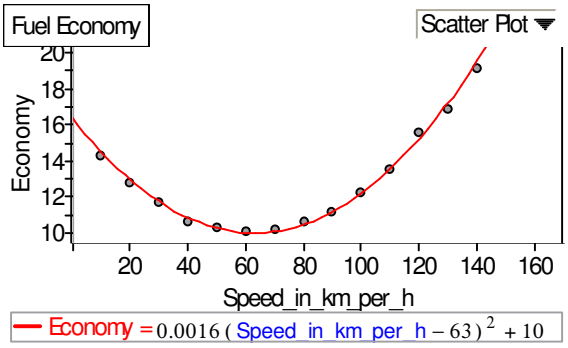
Complete each question in the chart provided.

1. How fast does a rumour spread?



Identify:	Reasons
Function Type linear quadratic exponential none of the above	
Domain:	
Range:	

2. The graph models the average fuel economy of a particular car, in litres per 100 km, at various speeds.



Identify:	Reasons
Function Type linear quadratic exponential none of the above	
Domain:	
Range:	

3. The table describes the cooling of a cup of coffee.

Time (min)	0	4	8	12	16	20
Temperature (°C)	55	47	40	34	29	25

Identify:	Reasons
Function Type linear quadratic exponential none of the above	
Domain:	
Range:	

4. If you invest $5000 in a stock that is increasing in value at a rate of 12% per year, then the value of your stock is given by $A = 5000(1.12)^n$, where A is the amount in dollars and n is the number of years.

Identify:	Reasons
Function Type linear quadratic exponential none of the above	
Domain:	
Range:	

5. The table below shows that height of a baseball, in metres, after t seconds.

Time (s)	Height of Ball (m)
0	0.8
1	25.9
2	41.2
3	46.7
4	42.4
5	28.3

Identify:	Reasons
Function Type linear quadratic exponential none of the above	
Domain:	
Range:	

6. A computer virus attached to an e-mail can spread rapidly. Once the attachment is opened, the virus will cause an infected e-mail to be sent to everyone in the recipient's address book. Assume that on average, a person has 15 addresses in his or her address book and that people read their e-mail once a day. The following table shows the spread of one computer virus through e-mail over the course of 6 days.

Time (days)	Number of E-mails with Virus
1	15
2	225
3	3 375
4	50 625
5	759 375
6	11 390 625

Identify:	
Function Type linear quadratic exponential none of the above	
Domain:	
Range:	

7. A herbicide was sprayed onto a field containing an estimated 5000 weeds. The number of weeds, N, still alive after t days can be modelled by $N(t) = 5000(0.4)^t$

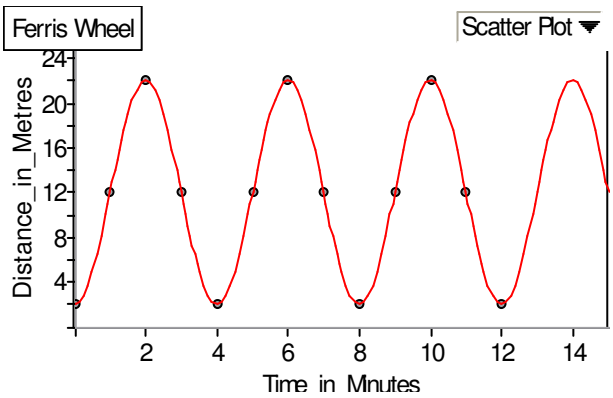
Identify:	Reasons
Function Type linear quadratic exponential none of the above	
Domain:	
Range:	

8. $(Pizza)^2$ charges \$10 for a large pizza plus \$2 per topping. The total cost of the pizza, C, can be modelled by $C = 2n + 10$, where n is the number of toppings.

Identify:	Reasons
Function Type linear quadratic exponential none of the above	
Domain:	
Range:	

9. Cheryl is riding a Ferris wheel. The graph below shows Cheryl's height above the ground.

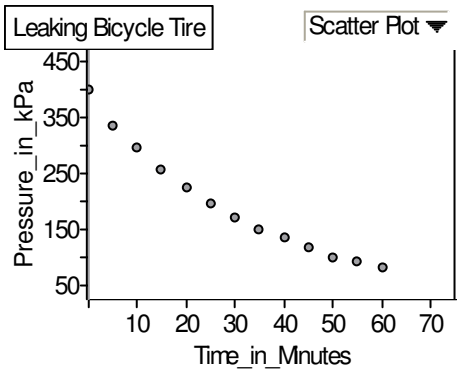
Cheryl's Height vs. Time



Identify:	Reasons
Function Type linear quadratic exponential none of the above	
Domain:	
Range:	

10.

Tire Pressure vs. Time



Identify:	Reasons
Function Type linear quadratic exponential none of the above	
Domain:	
Range:	