## Using Straight Lines to Model Relationships- Independent Practice Worksheet

Complete all the problems.

1) Is there any relationship between the rebound height of a ball when it's dropped and its second bounce height?

Drop Height	Rebound (1)	Rebound (2)
18	7	8
12	3	6
30	19	18
24	13	14
42	22	21
36	20	20
48	24	26

2) Is there any relationship between the temperature and latitude?

Cities	Temperature	Latitude
Los Angeles	50	40
Chicago	60	37
Houston	69	32
Dallas	41	44
San Jose	46	41
Boston	55	38
Denver	82	27

3) Is there any relationship between the arm spam and height?

Person	Arm Spam(cm)	Height (cm)
1	177	173
2	178	188
3	184	187
4	188	192
5	194	184
6	169	186
7	200	185

4) Is there any relationship between the sale of oil and the sale of vehicles?

Years	Vehicles Sold	Oil (liter)
2006	5000	10000
2007	7000	14000
2008	6000	12000
2009	8000	16000
2010	9000	18000
2011	7000	14000
2012	10000	20000

5) Is there any relationship between the sale of pens and ink bottles?

Company name	Number of pens	Ink bottles
Rotring	100	300
Parker	200	150
Pilot	300	200
Crayola	400	325
Expo	500	250
BIC	600	400
Reynolds	700	500

6) Is there any relationship between sale of the coffee and the tea during these seven months?

Months	Coffee (Packets)	Tea (Packets)
January	75	100
February	65	180
March	50	150
April	90	90
May	80	80
June	70	35
July	40	55

7) Is there any relationship between the use of cell phones and sim cards?

Mobile Company	Cell phones	Sim Cards
Idea	15000	20000
Vodafone	20000	20000
Airtel	21000	220000
Docomo	10000	12000
Aircel	8000	10000

8) Is there any relationship between nail paint and nail polish remover sales?

Cosmetic Companies	Nail Paint	Nail Removers
Revlon	50000	10000
Elle 18	30000	5000
Lakme	28000	6000
Oriflame	45000	8000
Amway	50000	5000
Avon	40000	7000

9) Is there any relationship between the average hours of studying and scores on exams?

Student's Name	Average hours of study	Scores
Jacob	17	72
William	19	72
Aiden	10	47
Noah	25	75
Jayden	19	61
Ethan	14	54

10) Is there any relationship between the population and the number of primary schools?

Cities	Population	Primary schools
Sydney	4605992	15000
Perth	1832114	10000
Adelaide	1262940	8000
Melbourne	4169103	14000
Brisbane	2146577	7000

**Using** 

