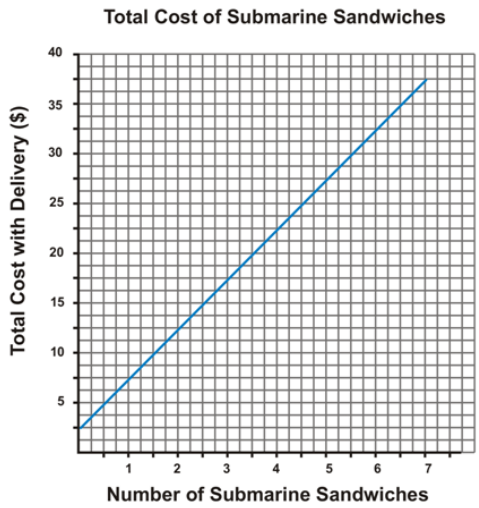
Modelling Linear Relations with Equations
Food Frenzy

A: <u>Teacher</u> **Partner B: <u>Students</u>**

Write the **equation** for each relationship in the space provided. Show any calculations you made. Indicate if the relation is a partial or direct variation.

A coaches B	B coaches A
1. A family meal deal at Chicken Deluxe costs $26, plus $1.50 for every extra piece of chicken added to the bucket.	2. A Chinese food restaurant has a special price for groups. Dinner for two costs $24 plus $11 for each additional person.

3.



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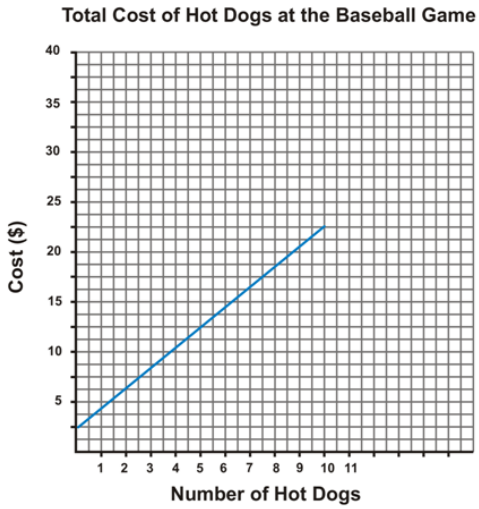


5.

Number of Toppings	Cost of a Large Pizza ($)
0	9.40
1	11.50
2	13.60
3	15.70
4	17.80

6.

Number of Scoops	Cost of Ice Cream with Sugar Cone ($)
0	1.25
1	2.00
2	2.75
3	3.50
4	4.25

5.8.1: Modelling Linear Relations with Equations (continued)

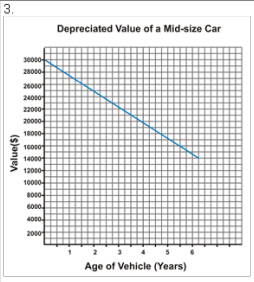
From Here to There

A: Teacher **Partner B: Students**

Write the equation for each relationship in the space provided. Show any calculations you made. Indicate if the relation is a partial or direct variation.

A coaches B	B coaches A
1. Rent a car for the weekend costs $50 plus $0.16/km.	2. A race car travels at a constant speed of 220km/h. Write an equation for the total distance travelled over time.

3.



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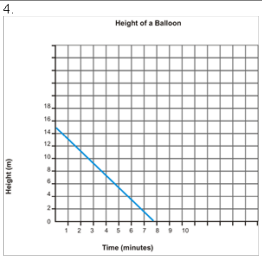


5.

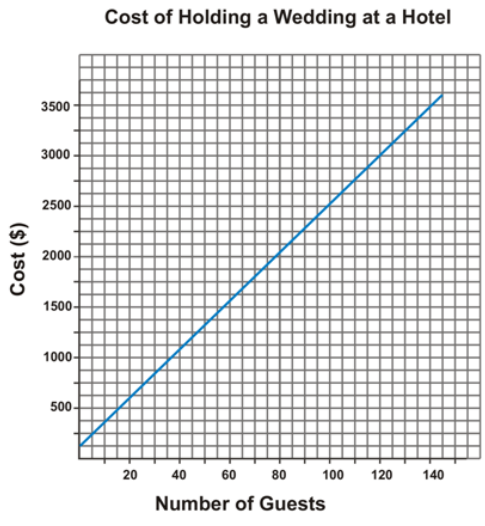
Distance (km)	Cost of a Taxi Fare ($)
0	3.50
10	6.50
20	9.50
30	12.50
40	15.50

6.

Distance (km)	Cost of Bus Charter ($)
0	170
100	210
200	250
300	290
400	330

A coaches B	B coaches A
1. A banquet hall charges $100 for the hall and $20 per person for dinner.	2. The country club charges a $270 for their facilities plus $29 per guest.

3.



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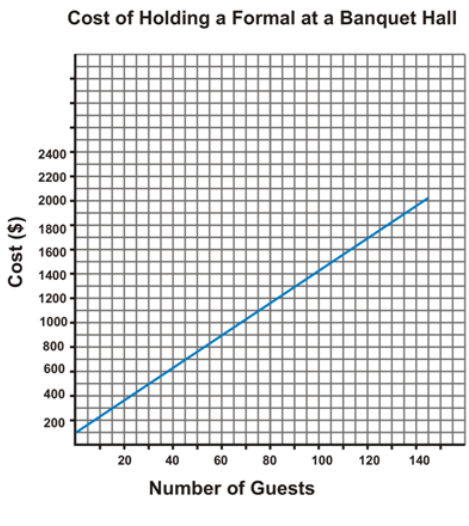

5.

Number of Athletes	Cost of Attending a Hockey Tournament
0	0
1	255
2	450
3	675
4	900

6.

Number of People	Cost of Holding an Athletic Banquet
0	75
20	275
40	475
60	675
80	875