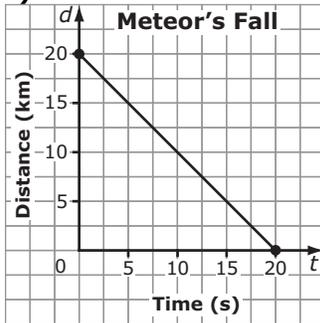# Chapter 6 BLM Answers

BLM 6–1 Chapter 6 Problems of the Week

1. a)

b) YES. The values of each variable change by the same amount each time.
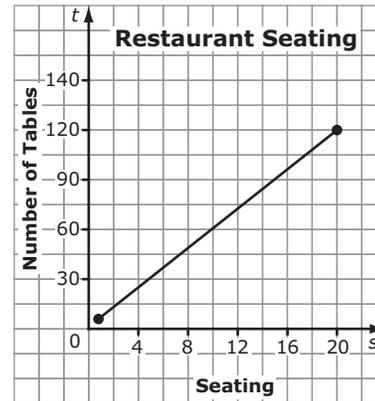
2. a) $y = 4x + 6$

b)

x	y
0	6
1	10
2	14
3	18
4	22
5	26
6	30
7	34
8	38
9	42
10	46
11	50

c) YES. The value of each variable changes by the same amount each time.

3. a)

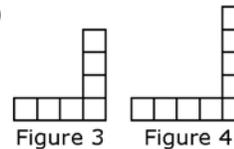| Number of Tables, t	Number of Chairs, s
1	6
2	12
3	18
4	24
5	30
6	36
7	42
8	48
9	54
10	60
11	66
12	72

b)

c) $s = 6t$

4. a) YES. The value of each variable changes by the same amount each time

b) For each 1.5-point increase in voltage, current increases by 30.

BLM 6–2 Section 6.1 Extra Practice

1. a)

Figure 3   Figure 4

b)

Figure Number, n	Number of Squares, s
1	3
2	5
3	7
4	9

c) 3, 2 **d)** $s = 2f + 1$ **e)** 31 **f)** 34

2. a)

Figure Number, f	1	2	3	4	5
Value, v	−5	−1	4	8	12

b) $v = 4n - 9$ **c)** 371 **d)** 57

3. a) $t = 5d + 11$ **b)** $r = -2c + 4$

4. a) $C = 45 + 0.15t$

b)

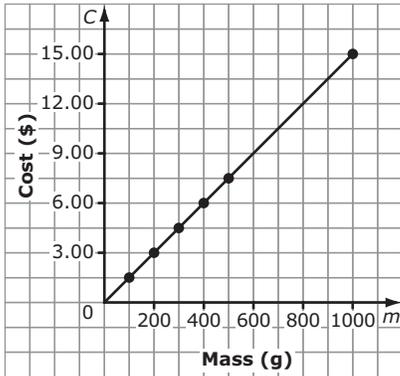| Number Of Text Messages, t	Monthly Cost, C
1	$45.15
2	$45.30
3	$45.45
4	$45.60
5	$45.75

c) $48 **d)** 233 messages; the $0.05 remainder is not enough for a text message

BLM 6–3 Section 6.2 Extra Practice

1. a) Answers will vary. 275 km. Example:
Locate 3 on the *x*-axis, and then find the
corresponding coordinate on the *y*-axis.
b) 3.33 h
2. Answers will vary. **a)** 2.1 **b)** 1.75
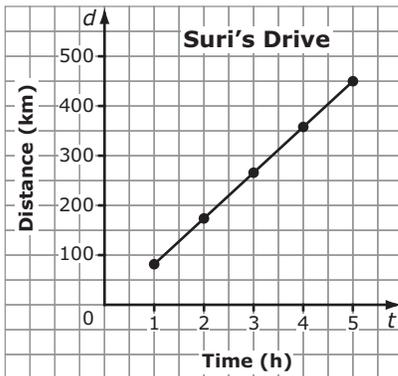**3.** Answers will vary. **a)** –0.8 **b)** –4

4. a)

b) $12.00 **c)** 700 g
5. Answers will vary. **a)** Example: It may be
reasonable only to interpolate or extrapolate
based on whole kilometres because the rental
company may not charge for partial kilometres.
b) $170 **c)** 177 km

BLM 6–5 Section 6.3 Extra Practice

1. a)

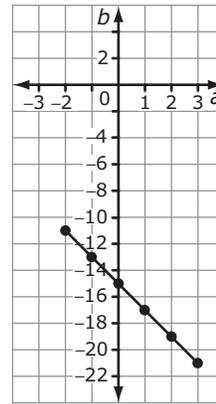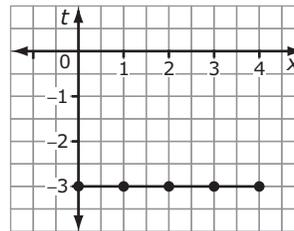| t	d
1	90
2	180
3	270
4	360
5	450
6	630

b)

c) 7 h

2. a)

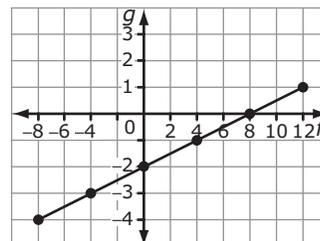| a	b
−2	−11
−1	−13
0	−15
1	−17
2	−19
3	−21

b)

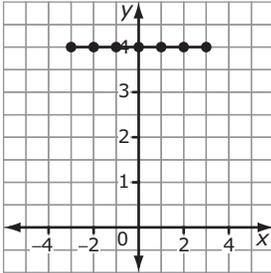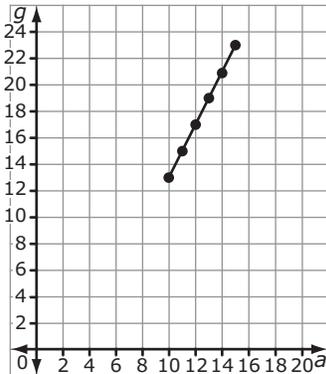| x	t
1	−3
2	−3
3	−3
4	−3
5	−3

c)

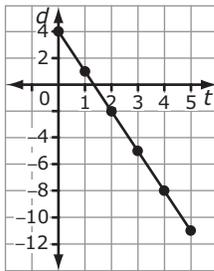| f	g
−8	−4
−4	−3
0	−2
4	−1
8	0
12	1

3. a) $y = 4$

b) $g = 2a - 7$

c) $d = -3t + 4$

4. a)

Distance, d	Pattern: $d \div 10$	Fuel Consumption, f
0	÷ 10	0
100	÷ 10	10
200	÷ 10	20
300	÷ 10	30
400	÷ 10	40
500	÷ 10	50

b) $f = \dfrac{d}{10}$ **c)** You could drive 350 km.

d) BOTH. You are assuming that you can drive part of a kilometre and use part of a litre of gas.

BLM 6–12 Chapter 6 Test

1. D **2.** A **3.** 9 **4.** −6
5. $C = 7 + 0.03p$
6. a) $e = 50 + 0.75t$
b) Example: Left Side = 87.50;
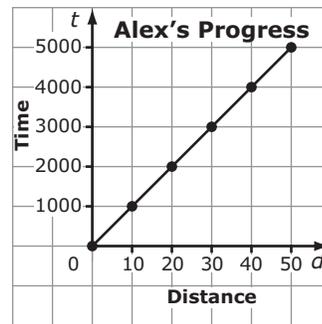Right Side = 50 + 0.75(50) = 87.50;
Left Side = Right Side
7. a)

Time, t	Distance, d
0	0
10	1000
20	2000
30	3000
40	4000
50	5000

b)

c) 35 min
8. a)

x	y
0	1
1	4
2	7
3	10
4	13

b) $y = 3x + 1$