Chapter 11 BLM Answers

BLM 11–2 Solving Equations

1. a) 90 **b)** 1.7 **c)** 6 **d)** 5 **e)** 3
2. Answers will vary. For example: Victor's van travels 2 km/min (20 km/10 min). Sharon's sedan travels 2 km/min as well (50 km/25 min). They will arrive at Point A at the same time (10 min).
3. a) 81 cm^2 **b)** 9 cm **c)** 12 × 9 = 108 cm
4. a) The number increases by 2 each time.
   b) Look for a set of 4 figures as follows:
      Figure 1: 3 shapes; Figure 2: 5 shapes;
      Figure 3: 7 shapes; Figure 4: 9 shapes.
5. a) The number increases by 3 each time.
   b)

Figure	1	2	3	4
Number	1	4	7	10

   c) Look for a graph with the following coordinates: (1, 1), (2, 4), (3, 7), and (4, 10).

BLM 11–3 Section 11.1 Extra Practice

1. a) equation **b)** expression
   c) expression **d)** equation
2. a) $4n - 3$ **b)** $6 + n = 9$ **c)** $7n - 8 = 13$
   d) $3n = 15$ **e)** $n \div 2$; $\frac{n}{2}$ **f)** $2n - 5 = 7$

3.

Expression	Variables	Numerical Coefficients	Constants
a) $5a + 14$	a	5	14
b) $7 - b$	b	−1	7
c) $11 - 7n - 4m$	n, m	−7, −4	11
d) $1 + \frac{n}{4}$	n	1/4	1

BLM 11–5 Section 11.2 Extra Practice

1. a) $x = 5$ **b)** $y = 17$ **c)** $w = 9$ **d)** $t = 21$
2. a) Subtract 6 from each side.
   b) Add 7 to each side.
   c) Add 16 to each side.
   d) Subtract 8 from each side.
3. a) $x - 3 + 3 = 15 + 3$; $x = 18$
   b) $y - 7 + 7 = 20 + 7$; $y = 27$
   c) $19 - 12 = 12 - 12 + b$; $b = 7$
   d) $23 - 6 = 6 - 6 + c$; $c = 17$
   e) $25 + 8 = d - 8 + 8$; $d = 33$

BLM 11–7 Section 11.3 Extra Practice

1. a) 4 **b)** 3 **c)** 5 **d)** 10 **e)** 12 **f)** 16
2. a) $x = 5$ **b)** $y = 7$
3. a) 3 **b)** 5 **c)** 10 **d)** 7 **e)** 11 **f)** 2
4. a) $w = 15$ **b)** $t = 24$

BLM 11–9 Section 11.4 Extra Practice

1. a) Subtract 6. **b)** Subtract 5.
   c) Add 8. **d)** Add 6.
2. a) $x = 9$ **b)** $n = 4$ **c)** $h = 3$ **d)** $x = 11$
3. a) $a = 5$ **b)** $c = 2$ **c)** $n = 3$ **d)** $m = 5$

BLM 11–11 Chapter 11 Test

1. EQ **2.** EX **3.** EX **4.** EQ
5. EQ **6.** EX **7.** C **8.** A
9. Connie's age = $2a + 3$
10. Mark is not correct. Answers may vary. For example: Mark added instead of multiplied 5 and 3, so he made a computation error. Left Side = 9; Right Side = 5(3) − 6 = 15 − 6 = 9; Left Side = Right Side, so $n = 3$.
11. a) $m = 6$ **b)** $a = 6$ **c)** $c = 18$
   d) $x = 13$ **e)** $k = 14$ **f)** $w = 60$
12. a) $x = 4$ **b)** $x = 1$ **c)** $n = 7$
13. a) $x + 5$ **b)** $3x - 8$ **c)** $2x + 8$ **d)** $6x - 3$
14. Answers may vary. Ensure students draw a picture that correctly represents $4x - 3 = 5$.
15. a) $4x + 13 = 185$
   b) $x = 43$; Left Side = 4(43) + 13 = 172 + 13 = 185; Right Side = 185; Left Side = Right Side
16. a) $12 = 2x - 6$ **b)** $x = 9$
   c) Ensure diagram accurately represents the equation. **d)** $x = 3$