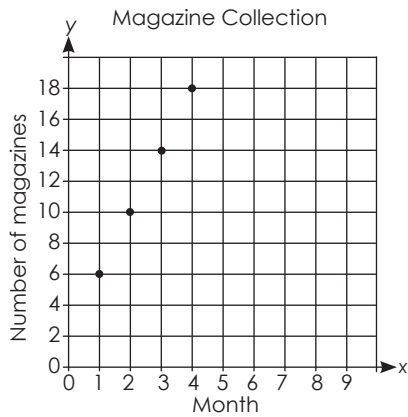


Sample answers have been provided for open-ended questions as indicated. Where applicable, solutions for subsequent parts of a question are based on the sample answer given.

**Cumulative Review: Chapters 1 and 2**

**Student Book (52–54)**

1. a. 26
- b.  $4m + 2 = n$ ,  $m$  is the number of months,  $n$  is the number of magazines



- d. If I continue the pattern and then look at the point for month 6, it will be the number of magazines.
2. **Sample answer:**  
The value of  $x$  is 9 for all equations; sometimes  $x$  is to the left of the equal sign and sometimes to the right; two of the equations use multiplication.
3. **Sample answer:**  
 $2a = 8$ ,  $\frac{a}{2} = 2$ ,  $a + 3 = 7$ ,  $4a - 1 = 15$   
 $2a = 8$ : The number of eyes in a group is double the number of people. If there are eight eyes, how many people are there?
4. a. The mass of one golf ball equals the mass of two tennis balls.  
b. three golf balls  
c. four tennis balls  
d. 23 g  
e. **Sample answer:**  
 $2(23) + 2(46) = 6(23)$

Tiger	
Days	Mass
0	1400
1	1600
2	1800
3	2000

German Shepherd	
Week	Mass
0	3000
1	3525
2	4050
3	4575

5. a. 1 week: tiger's mass: 2800 g; German Shepherd's mass: 3525 g  
10 days: tiger's mass: 3400 g; German Shepherd's mass: about 3800 g  
b. After four weeks the tiger weighs 5600 g and the German Shepherd weighs 5125 g.  
c. **Sample answer:**  
What is the mass of the tiger and the German Shepherd on day 12? How much greater is the mass of the German Shepherd than the mass of the tiger on day five?

6. **Sample answers:**  
a.  $24 = 17 + m$       b.  $24 - 17 = m$ ,  $m = 7$
7. **Sample answers:**  
a.  $24 = 4r$       c.  $24 = r + r + r + r$ ,  $24 \div 4 = r$   
d.  $24 \div 4 = 4r \div 4$   
 $6 = r$

8. a.

Number of centre tiles	Number of border tiles
1	8
2	10
3	12
4	14
5	16

- b.  $2c + 6 = b$ ,  $c$  is the number of centre tiles,  $b$  is the number of border tiles.
- c.  $2c + 6 = b$   
 $2(5) + 6 = b$   
 $10 + 6 = b$   
 $16 = b$   
Manuel will need 16 border tiles.
9. a. **Sample answer:**  
 $n - 2 = 12 \div 2$  or  $n - 2 = 6$   
b.  $n = 8$