









ML8 Chapter 10 Problems of the Week Answers

BLM 10–4 Chapter 10 Problems of the Week

1.  = 48  = 12  = 6  = 4

 = 8  = 3  = 5  = 2

2. The solution is incorrect.

$$\begin{aligned}x - 3 &= 7 \\x - 3 + 3 &= 7 + 3 \\x &= 10\end{aligned}$$

3. Methods may vary. Let x be the age of the first child, $x + 1$ the age of the second child, and $x + 2$ the age of the third child.

Solve by Guess and Check:

$$x = 10$$

$$10 + (10 + 1) + (10 + 2) = 33 \text{ Too Low}$$

$$x = 11$$

$$11 + (11 + 1) + (11 + 2) = 36 \text{ Correct}$$

Aunt Katrina's children are 11 years old, 12 years old, and 13 years old.

4. $173 \div 100 = 1.73$

$$1.73 \text{ m} = 173 \text{ cm}$$

$$3.14d \approx 173$$

$$d \approx 173 \div 3.14$$

$$d \approx 55$$

The diameter of my bicycle wheel is approximately 55 cm.

5. a) Let x be my successful shots and $x - 6$ be my partner's successful shots.

$$3(x - 6) = 30$$

$$x - 6 = 10$$

$$x = 16$$

I made 16 successful shots.

b) My score was $16(3) - 10(2) = 28$ points.

My partner scored 30 points. I did not win.

c) It is better to throw fewer shots that are more accurate. I should take my time when I shoot.

d) Answers may vary. Example: If one person makes 10 successful shots and misses one shot, and the other person makes 16 successful shots and misses 10 shots, they will be tied.

6. $4(8) + 3x = 143$

$$32 + 3x = 143$$

$$3x = 111$$

$$x = 37$$

The ride was 37 km.

7. Answers will vary.