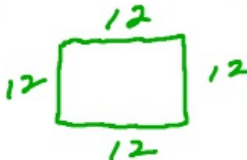


M7 Ch6 Practice test

<p>1. Which of the following problems can be solved using the equation $x - 9 = 15$?</p> <p>A. Allison is 9 years <u>younger</u> than her sister Pam. Allison is 15 years old. What is x, Pam's age? <i>24 - 9 = 15</i> <i>24</i> <i>15</i></p> <p>B. David's portion of the bill is \$9 more than Jaleel's portion of the bill. If Jaleel pays \$9, find x, the amount in dollars that David pays.</p> <p>C. The sum of two numbers is 15. If one of the numbers is 9, what is x, the other number? <i>x + 9 = 15</i></p> <p>D. Calvin owns 15 CDs. If he gave 9 of them to a friend, what is x, the number of CDs he has left?</p>	<p>A</p>
<p>2. Three children each had the same amount of money in their savings accounts. One of the children withdrew a <u>quarter of her money</u> and spent it all on a \$10 T-shirt. What was the total amount of money originally in the accounts?</p> <p><i>x = TOTAL PER CHILD</i> <i>4 · 1/4 x = 10 · 4</i> <i>1/4</i> <i>x = 40</i></p>	<p><i>\$120</i> <i>\$40 PER CHILD</i></p>
<p>3. The length of each side of a square was decreased by 2 inches, so the perimeter is <u>now 48 inches</u>. What was the original length of each side of the square?</p> <p>A. 10 in. B. 12 in. C. 14 in. D. 16 in.</p> 	<p>C</p>
<p>4. \$3 less than Sara has A. 3 - S B. S - 3 C. S + 3 D. S x 3</p> <p><i>\$3 MORE</i> <i>3 + S</i> <i>S + 3</i> <i>10/2 = 5</i> <i>2/10 = 1/5</i></p>	<p>B</p>
<p>5. a number increased by 12 A. 12 - n B. n - 12 C. 12 + n D. n + 12</p> <p><i>ADDITION</i> <i>MULTIPLICATION</i> <i>COMMUTATIVE</i></p>	<p>C OR D</p>
<p>Identify the solution of each equation.</p>	
<p>6. $6 + n = 21$ A. 14 B. 15 C. 16</p>	<p>B</p>
<p>7. $p - 2 = 17$ A. 17 B. 19 C. 21</p>	<p>B</p>
<p>8. $4h = 32$ A. 6 B. 8 C. 9</p>	<p>B</p>
<p>Solve each inequality. BE SURE TO SHOW YOUR WORK</p>	
<p>9. $y + 8 \geq 20$ <i>-8 -8</i> <i>y \geq 12</i> <i>y > 12</i></p>	<p>10. $w - 1 \leq 3$ <i>+1 +1</i> <i>w \leq 4</i> <i>w \leq 4</i></p>

11. Gordon's friend Kendrick is reading the book **Myopia**. He has already read the first 85 pages. He wants to finish the book in seven days. Write and solve an inequality to show how many pages Kendrick will need to read each day. (Use p to represent the pages read per day.)

Book	Number of Pages
City Streets	387
Life and Time	411
Myopia	435

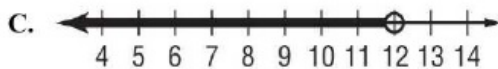
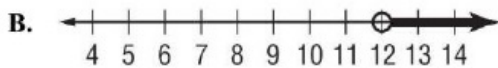
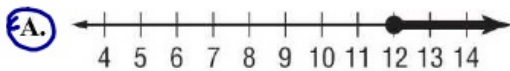
$$435 - 85 = 350$$

$$\frac{350}{7}$$

$$7p + 85 \geq 435$$

$$\begin{array}{r} -85 \\ \hline 7p \geq 350 \\ \hline p \geq 50 \end{array}$$

13. Joshua spends \$0.25 for every song he downloads to his cell phone. Which of the following represents the number of songs he can download if he has more than \$3?



D. Not enough information is given.

$$0.25d > 3$$

$$\frac{0.25d}{0.25} > \frac{3}{0.25}$$

$$d > 12$$

14. What value of x makes this equation true?

$$4x + 7 \leq 40$$

- A. 12
 B. 10
 C. 9
 D. 8

$$4(8) + 7 \leq 40$$

$$32 + 7 \leq 40$$

$$39 \leq 40$$

$$4(10) + 7 \leq 40$$

$$40 + 7 \leq 40$$

$$47 \leq 40$$

$$4x + 7 \leq 40$$

$$\begin{array}{r} -7 \\ \hline 4x \leq 33 \\ \hline x \leq 8.25 \end{array}$$

15. For a warm up, Samuel runs 200 yards less than half the maximum distance he can run. This is represented by the equation $r = \frac{1}{2}x - 200$, where x represents the maximum distance he can run and r represents the distance run during his warm up. If Samuel ran 1,000 yards during his warm up, what is the maximum distance he can run?

- A. 3,600 yards
 B. 2,400 yards
 C. 1,800 yards
 D. 1,600 yards

$$r = \frac{1}{2}x - 200$$

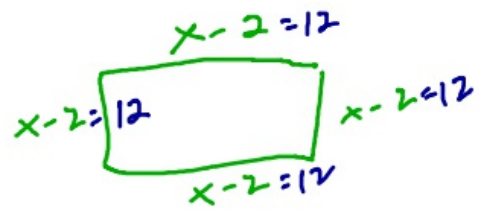
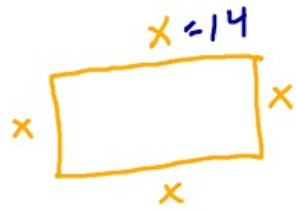
$$1000 = \frac{1}{2}x - 200$$

$$\begin{array}{r} +200 \\ \hline 1200 = \frac{1}{2}x \end{array}$$

$$2 \cdot 1200 = 2 \cdot \frac{1}{2}x$$

$$2400 = 1x$$

$$\frac{1}{2} \cdot \frac{1}{2} = \frac{1}{4}$$



$$P = 48$$