

ANSWER PRESENTATION TOOL

Green - Student Edition

7

Chapter Test

1-21

ALL EVEN

Show Solutions

ODD

1. 7 times a number s is 84.

$$7s \qquad \qquad \downarrow \quad \downarrow$$

$$\qquad \qquad \qquad = 84$$

An equation is $7s = 84$.

2. 13 is one-third of a number m .

$$\downarrow \quad \downarrow$$

$$13 = \qquad \qquad \frac{1}{3}m$$

An equation is $13 = \frac{1}{3}m$.

3. $15 = 7 + b$ **Check:** $15 = 7 + b$

$$\frac{-7}{8} \quad \frac{-7}{8} \qquad \qquad 15 \stackrel{?}{=} 7 + 8$$

$$8 = b \qquad \qquad \qquad 15 = 15 \checkmark$$

The solution is $b = 8$.

$$4. \quad v - 6 = 16$$

$$\quad \underline{+6} \quad \underline{+6}$$

$$\quad v = 22$$

$$\text{Check: } v - 6 = 16$$

$$22 - 6 \stackrel{?}{=} 16$$

$$16 = 16 \quad \checkmark$$

The solution is $v = 22$.

$$5. \quad 5x = 70$$

$$\frac{5x}{5} = \frac{70}{5}$$

$$x = 14$$

$$\text{Check: } 5x = 70$$

$$5(14) \stackrel{?}{=} 70$$

$$70 = 70 \quad \checkmark$$

The solution is $x = 14$.

$$6. \quad 3b = 45$$

$$\frac{3b}{3} = \frac{45}{3}$$

$$b = 15$$

$$\text{Check: } 3b = 45$$

$$3(15) \stackrel{?}{=} 45$$

$$45 = 45 \quad \checkmark$$

The solution is $b = 15$.

$$7. \quad \frac{6m}{7} = 30$$

$$\frac{6}{7}m = 30$$

$$\frac{7}{6} \cdot \frac{6}{7}m = \frac{7}{6} \cdot 30$$

$$m = 35$$

$$\text{Check: } \frac{6m}{7} = 30$$

$$\frac{6(35)}{7} \stackrel{?}{=} 30$$

$$\frac{210}{7} \stackrel{?}{=} 30$$

$$30 = 30 \quad \checkmark$$

The solution is $m = 35$.

$$\begin{array}{ll}
 \mathbf{8.} & \frac{8k}{3} = 32 & \mathbf{Check:} & \frac{8k}{3} = 32 \\
 & \frac{8}{3}k = 32 & & \frac{8(12)}{3} \stackrel{?}{=} 32 \\
 & \frac{3}{8} \cdot \frac{8}{3}k = \frac{3}{8} \cdot 32 & & \frac{96}{3} \stackrel{?}{=} 32 \\
 & k = 12 & & 32 = 32 \checkmark
 \end{array}$$

The solution is $k = 12$.

$$\mathbf{9.} \quad y = 9x; (3, 27)$$

$$27 \stackrel{?}{=} 9(3)$$

$$27 = 27 \checkmark$$

So, $(3, 27)$ is a solution.

$$\mathbf{10.} \quad y = 4x + 2; (8, 36)$$

$$36 \stackrel{?}{=} 4(8) + 2$$

$$36 \neq 34 \times$$

So, $(8, 36)$ is *not* a solution.

11. Words: The number is at 300.
of songs most

Variable: Let n be the number of songs on the MP3 player.

Inequality: $n \leq 300$

An inequality is $n \leq 300$.

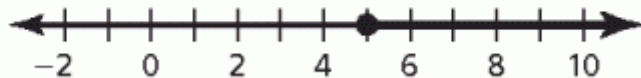
12. Words: The height is at 48 inches.
of the rider least

Variable: Let h be the height of rider.

Inequality: $h \geq 48$

An inequality is $h \geq 48$.

13. $x \geq 5$



14. $m \leq -2$



15. $x - 3 < 7$

$$\begin{array}{r} +3 \quad +3 \\ x - 3 < 7 \\ \hline x < 10 \end{array}$$

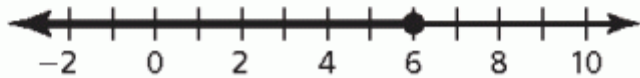
The solution is $x < 10$.



$$16. \quad 12 \geq n + 6$$

$$\begin{array}{r} \underline{-6} \quad \underline{-6} \\ 6 \geq n \end{array}$$

The solution is $n \leq 6$.



$$17. \quad \frac{4}{3}b \leq 12$$

$$\begin{array}{r} \frac{3}{4} \cdot \frac{4}{3}b \leq \frac{3}{4} \cdot 12 \\ b \leq 9 \end{array}$$

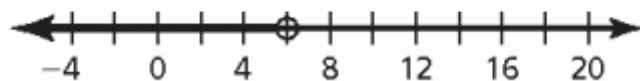
The solution is $b \leq 9$.



$$18. \quad 72 > 12p$$

$$\begin{array}{r} \frac{72}{12} > \frac{12p}{12} \\ 6 > p \end{array}$$

The solution is $p < 6$.



19. Words: The cost of each ticket times the number of tickets sold equals the total amount collected in ticket sales.

Variable: Let n be the number of tickets sold.

Equation: $4 \cdot n = 332$

$$4n = 332$$

$$\frac{4n}{4} = \frac{332}{4}$$

$$n = 83$$

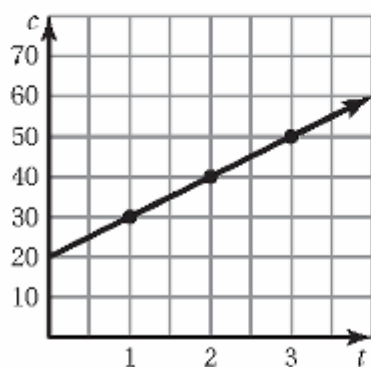
So, 83 students attended the dance.

- 20. a.** Words: Total equals shipping plus cost per
 cost fee t-shirt
 times number of
 t-shirts
 ordered.

Variables: Let c be the total cost of ordering the t-shirts, and let t be the number of t-shirts ordered.

Equation: $c = 20 + 10 \cdot t$

Number of T-shirts, t	$c = 20 + 10t$	Total Cost, c	Ordered Pair, (t, c)
1	$c = 20 + 10(1)$	30	(1, 30)
2	$c = 20 + 10(2)$	40	(2, 40)
3	$c = 20 + 10(3)$	50	(3, 50)



- b. Sample answer:** The ordered pair $(2, 40)$ means that 2 t-shirts were ordered at a total cost of \$40.

21. Words: Wind speeds are greater than 74 miles
or equal to per hour.

Variable: Let w be the wind speeds.

Inequality: $w \geq 74$

An inequality is $w \geq 74$.