

# ANSWERS FOR 1.7

For use with pages 53-56

## 1.7 Guided Practice

2. If  $a$  is a negative number, then  $-a$  is a positive number.

4. no                      6. yes

8. yes

10.  $-5 < x + 8 < 5$

12.  $9 - x < 21$  or  $9 - x > 21$

14.  $10 - 3x \leq -17$  or  $10 - 3x \geq 17$

16.  $|x - 20| \leq 0.45$

The weight can range between 19.55 oz and 20.45 oz, inclusive.

## 1.7 Practice and Application

18.  $5 - 2x = 13$  or  $5 - 2x = -13$

20.  $5n - 4 = 16$  or  $5n - 4 = -16$

22.  $2 - x = 3$  or  $2 - x = -3$

24.  $\frac{1}{2}x + 4 = 6$  or

$\frac{1}{2}x + 4 = -6$

26. no                      28. yes

30. no                      32.  $-3; -8$

34.  $\frac{17}{3}; 9$

36.  $\frac{11}{4}; -3$

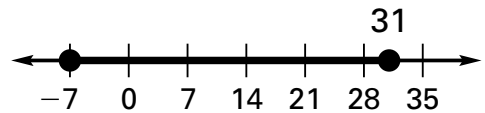
38.  $52; -12$       40.  $10; 2$

42.  $4n - 12 < -16$  or  $4n - 12 > 16$

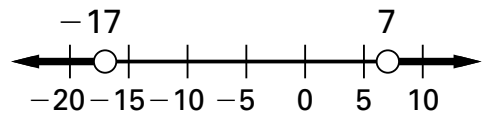
44.  $2x = 1 \leq -12$  or  $2x - 1 \geq 12$

46.  $-23 < 11 + 4x < 23$

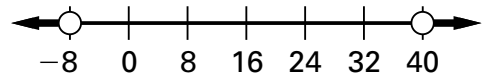
48.  $-7 \leq x \leq 31$



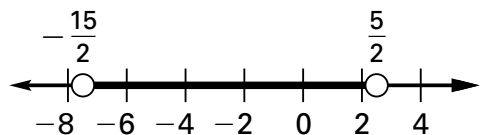
50.  $x > 7$  or  $x < -17$



52.  $x > 40$  or  $x < -8$



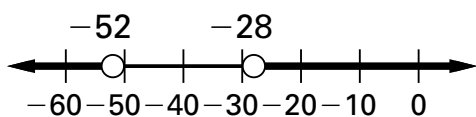
54.  $-\frac{15}{2} < x < \frac{5}{2}$



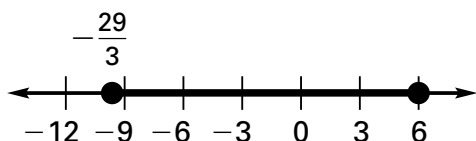
# ANSWERS FOR 1.7 (CONT.)

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56.  $x > -28$  or  $x < -52$



58.  $-\frac{29}{3} \leq x \leq 6$



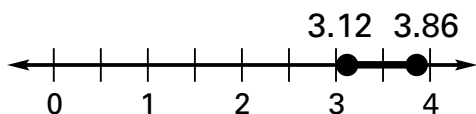
60.

$0 \leq x \leq 1$

62.  $-4 \leq x \leq 8$

64.  $x \leq -6$  or  $x \geq 7$

66.  $|p - 3.49| \leq 0.37$



68.  $|I - 89| \leq 5$

70.  $|w - 16| \leq 0.4$

72.

<i>Sport</i>	<i>Weight range of ball used</i>
Volleyball	$ v - 270  \leq 10$ g
Basketball	$ b - 625  \leq 25$ g
Water polo	$ w - 425  \leq 25$ g
Lacrosse	$ l - 145.5  \leq 3.5$ g
Football	$ f - 14.5  \leq 0.5$ g

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74.  $|d - 50| \leq 50$

76.  $|h - (2.26 \cdot 51.6 + 66.4)| \leq 3.42$

between 180 cm and 186 cm, inclusive

# ANSWERS FOR 1.7 (CONT.)

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78. B

80. all real numbers

82. no solution

84. all real numbers

86.  $-b - a < x < b - a$

88.  $x \leq -2a$  or  $x \geq 0$

## 1.7 Mixed Review

90. true

92. False; a rectangle is a square only when its length and width are equal.

94. -24

96. 29

98.  $\frac{61}{6}$

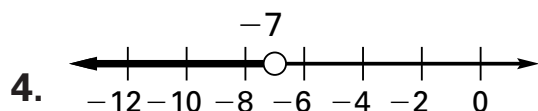
100.  $-\frac{27}{5}$

102.  $x \leq -15$  104.  $x < -1$

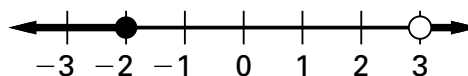
106.  $x \leq -3$  or  $x \geq 2$

## Quiz 3

2.  $y < -7$



$x \leq -2$  or  $x > 3$

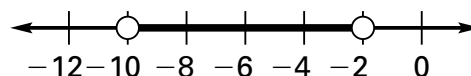


6. 1; 5

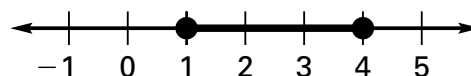
8.  $-\frac{3}{2}$ ; 5

10. 9; 1

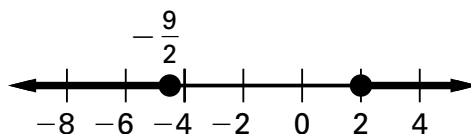
12.  $-10 < x < -2$



14.  $1 \leq y \leq 4$



16.  $x \geq 2$  or  $x \leq -\frac{9}{2}$



18.  $|d - 30| \leq 0.045$   
between 29.955 mm and 30.045 mm, inclusive