

Chapters 1–4 Answers (continued)

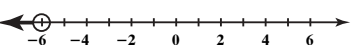
Enrichment 4-7

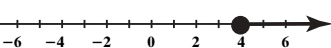
1. 13 years $\leq x \leq 14$ years; 90 lb $\leq x < 95$ lb 2. Midget; two 90-second periods 3. 15 years $\leq x \leq 16$ years
4. Bantam division

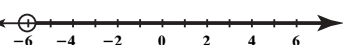
Puzzle 4-7

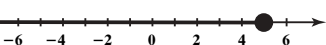
1. T 2. O 3. S 4. M 5. A 6. L
TOO SMALL

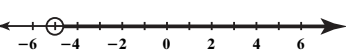
Practice (regular) 4-8

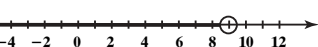
1. $w < -6$ 

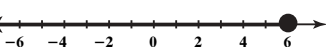
2. $a \geq 4$ 

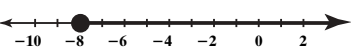
3. $a > -6$ 

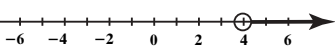
4. $x \leq 5$ 

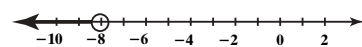
5. $a > -5$ 

6. $t < 9$ 

7. $r \leq 6$ 

8. $a \geq -8$ 

9. $h > 4$ 

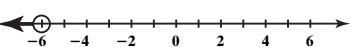
10. $y < -8$ 

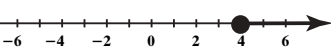
11. $x + 44 > 85; x > 41$; Lawrence needs to score more than 41 points. 12. $x + 12,500 \leq 16,000; x \leq 3,500$; you can not load more than 3,500 pounds on the truck.

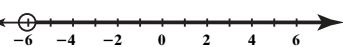
Guided Problem Solving 4-8

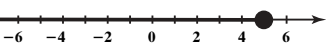
1. give you \$35; \$100 2. Find how much money you need to save to buy the scooter. 3. ≥ 100 4. $s + 35$ 5. at least \$100
6. $s + 35 \geq 100$ 7. $s \geq 65$ 8. at least \$65 9. \$100
10. $h + 36 \geq 42; h \geq 6$ in.

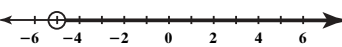
Practice (adapted) 4-8

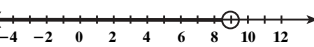
1. $w < -6$ 

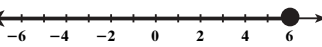
2. $a \geq 4$ 

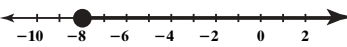
3. $a > -6$ 

4. $x \leq 5$ 

5. $a > -5$ 

6. $t < 9$ 

7. $r \leq 6$ 

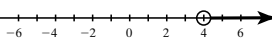
8. $a \geq -8$ 

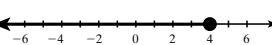
9. $x + 44 > 85; x > 41$; Lawrence needs to score more than 41 points.

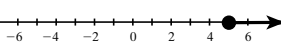
Activity Lab 4-8

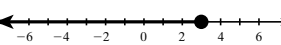
1. $x \geq 2$ 2. $x \geq 2$ 3. $x \geq 1$ 4. $x \leq -5$ 5. $x \geq -3$ 6. $x \leq -5$
7. Check students' graphs and answers.

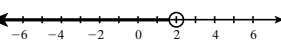
Reteaching 4-8

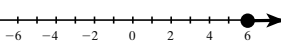
1. $a > 4$ 

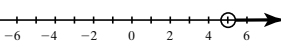
2. $w \leq 4$ 

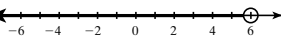
3. $a \geq 5$ 

4. $w \leq 3$ 

5. $y < 2$ 

6. $g \geq 6$ 






7. $x > 5$ 

8. $r < 6$ 

Enrichment 4-8

- 1–5. Sample answers are given. 1. $6 + 6 \geq 12$ 2. $-2 + 4 < 3$
3. $6 - 4 < 3$ 4. $3 + 3 > 4$

5. Complete the key with the correct symbol.

	means 12		means 6		means -2
	means 4		means 3		

Puzzle 4-8

1. $160 + x \leq 500$ 2. $x + 1 > 3$ 3. $x + 14 \leq 25$ 4. $x + 57 \leq 160$
5. $9,400 + x > 15,000$ 6. $273 - x \leq 250$

Guided Problem Solving 4-3

1. 12 ladybugs; 9 fewer **2.** Find the number of ladybugs the student collected yesterday. **3.** the number of ladybugs the student collected yesterday **4.** 12 **5.** Sample: b **6.** $b - 9$
7. $12 = b - 9$ **8.** $b = 21$ **9.** 21 ladybugs **10.** $12 = b - 9$; $12 = 21 - 9$; $12 = 12$ **11.** $72 = k + 15$; 57 in. tall

Practice 4-4

1. 14 **2.** -243 **3.** -28 **4.** -18 **5.** 36 **6.** 48 **7.** -7 **8.** -7
9. 16 **10.** -52 **11.** -7 **12.** -126 **13.** -96 **14.** -5 **15.** 4
16. 288 **17.** -399 **18.** 1,386 **19.** -4 **20.** -8,918 **21.** -113
22. -50 **23.** $15n = 240$, $n = 16$; 16 flowers **24.** $\frac{10,500}{n} = 1,500$,
 $n = 7$; 7 gal

Guided Problem Solving 4-4

1. 26 lb; 390 lb **2.** Find the number of years it will take for a tree to absorb 390 lb of carbon dioxide. **3.** Multiplication; the number of years times the amount of carbon dioxide a tree absorbs each year equals the total amount of carbon dioxide absorbed. **4.** 26 lb **5.** 26y lb **6.** $26y = 390$ **7.** $y = 15$
8. 15 years **9.** $26y = 390$; $26 \times 15 = 390$; $390 = 390$
10. $8x = 1,000$; $x = 125$ days

Practice 4-5

1. Let $g =$ the price of gas; $6g - 20$ **2.** Let $d =$ the distance from Boston to New York; $\frac{1}{2}d - 25$ **3.** Let $e =$ the number of eggs needed in the recipe; $5e - 2$ **4.** Let $m =$ the number of megabytes in a computer; $\frac{m - 10}{6}$ **5.** $h = 3$ **6.** $s = 9$ **7.** $y = 1$
8. $g = 4$ **9.** $j = 2$ **10.** $w = 4$ **11.** $h = 6$ **12.** $g = 32$
13. $b = 7$ **14.** $\$5 + \$2m$; \$45

Guided Problem Solving 4-5

1. 2 zucchini per minute; 30 sliced zucchini; already sliced 12 zucchini **2.** Find how long it will take to finish slicing the zucchini. **3.** the number of minutes it will take to finish slicing the zucchini **4.** 30 **5.** 12 **6.** $30 - 12 = 18$ **7.** 2 minutes
8. $2t = 18$ **9.** 9 minutes **10.** $9 \times 2 = 18$; yes **11.** $t = 2$ hours

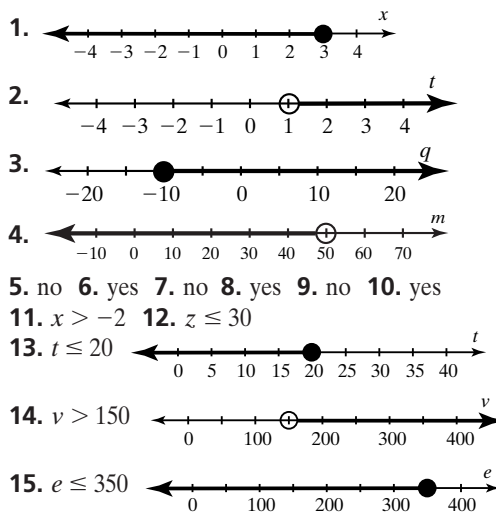
Practice 4-6

1. $m = 9$ **2.** $y = 35$ **3.** $y = 12$ **4.** $m = 342$ **5.** $y = -60$
6. $a = 10$ **7.** $c = 225$ **8.** $t = -2$ **9.** $b = -4$ **10.** $d = -1$
11. $z = 153$ **12.** $e = 175$ **13.** $f = 18$ **14.** $y = 3$ **15.** $w = 27$
16. $j = -57$ **17.** $(4 + 8) \div 3 = 4$ **18.** $(11 + 4) \times 5 = 75$
19. $(9 + 3) \div 2 = 6$ **20.** $(9 - 1) \times 4 = 32$ **21.** C **22.** A
23. D **24.** B

Guided Problem Solving 4-6

1. \$20 per hour; \$1.50; \$117 **2.** Find the number of hours you need to work to earn \$117. **3.** \$3 **4.** $20h$ **5.** $20h - 3$ **6.** \$117
7. $20h - 3 = 117$ **8.** $h = 6$ **9.** 6 hours **10.** $20h - 3 = 117$; $20 \times 6 - 3 = 117$; $117 = 117$ **11.** 7 hours

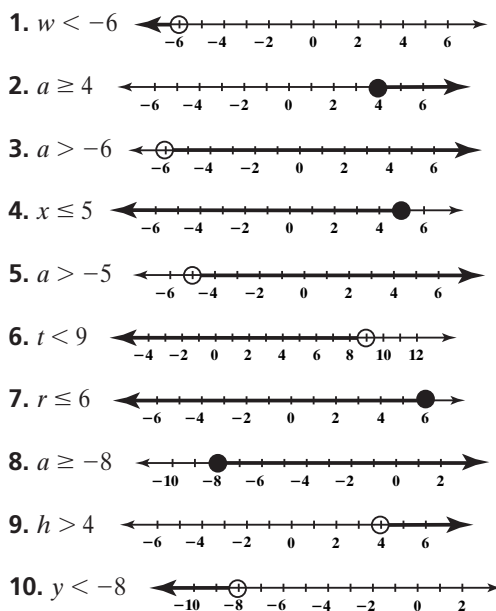
Practice 4-7



Guided Problem Solving 4-7

1. Explain why -17 is greater than -22. **2.** a number line
3-4. **5.** -17 **6.** -17 is farther to the right on the number line.
7. the definition of ordering numbers **8.** -8 is farther to the left on the number line.

Practice 4-8



- 11.** $x + 44 > 85$; $x > 41$; Lawrence needs to score more than 41 points. **12.** $x + 12,500 \leq 16,000$; $x \leq 3,500$; you can not load more than 3,500 pounds on the truck.

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