

81. AUDIBLE FREQUENCIES An elephant can hear sounds with frequencies from 16 hertz to 12,000 hertz. A mouse can hear sounds with frequencies from 1000 hertz to 91,000 hertz. Write an absolute value inequality for the hearing range of each animal.

82. CHALLENGE The depth finder on a fishing boat gives readings that are within 5% of the actual water depth. When the depth finder reading is 250 feet, the actual water depth x lies within a range given by the following inequality:

$$|x - 250| \leq 0.05x$$

- Write the absolute value inequality as a compound inequality.
- Solve each part of the compound inequality for x . What are the possible actual water depths if the depth finder's reading is 250 feet?

TAKS PRACTICE at classzone.com

MIXED REVIEW FOR TAKS

REVIEW

TAKS Preparation
p. 66;
TAKS Workbook

83. TAKS PRACTICE A car dealership hires Anne to wash cars. She is paid \$28 per day plus \$6 for every car she washes. Anne shares the money equally with a friend who assists her. After five days, Anne's share of the pay is \$130. How many cars did Anne and her friend wash? **TAKS Obj. 10**

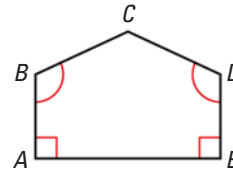
- (A) 17 (B) 20 (C) 32 (D) 39

REVIEW

TAKS Preparation
p. 408;
TAKS Workbook

84. TAKS PRACTICE Pentagon $ABCDE$ is the outline of the front of a cabin. The measure of $\angle ABC$ is 115° . What is the measure of $\angle BCD$? **TAKS Obj. 6**

- (F) 90° (G) 115°
(H) 130° (J) 155°



QUIZ for Lessons 1.6–1.7

Solve the inequality. Then graph the solution. (p. 41)

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|--------------------|---------------------------|--------------------------|
| 1. $4k - 17 < 27$ | 2. $14n - 8 \geq 90$ | 3. $-9p + 15 \leq 96$ |
| 4. $-8r - 11 > 45$ | 5. $3(x - 7) < 6(10 - x)$ | 6. $-25 - 4z > 66 - 17z$ |

Solve the equation or inequality. (p. 51)

- | | | |
|-------------------|-----------------------|----------------------|
| 7. $ x - 6 = 9$ | 8. $ 3y + 3 = 12$ | 9. $ 2z + 5 = -9z$ |
| 10. $ p + 7 > 2$ | 11. $ 2q - 3 \leq 3$ | 12. $ 5 - r \geq 4$ |

13. TEST SCORES Your final grade in a course is 80% of your current grade, plus 20% of your final exam score. Your current grade is 83 and your goal is to get a final grade of 85 or better. Write and solve an inequality to find the final exam scores that will meet your goal. **(p. 41)**

14. GROCERY WEIGHTS A container of potato salad from your grocer's deli is supposed to weigh 1.5 pounds, with a tolerance of 0.025 pound. Write and solve an absolute value inequality that describes the acceptable weights for the container of potato salad. **(p. 51)**