

57. **TX TAKS REASONING** In golf, your score on a hole is the number of strokes above or below an expected number of strokes needed to hit a ball into the hole. As shown in the table, each score has a name. When you compare two scores, the lesser score is the better score.

Name	Double eagle	Eagle	Birdie	Par	Bogey	Double bogey
Score	-3	-2	-1	0	1	2

- a. **Compare** For three holes, you score an eagle, a double bogey, and a birdie. Your friend scores a double eagle, a bogey, and a par. Who has the better total score?
- b. **Explain** Your friend scores a double eagle and an eagle for the next two holes. Is it possible for you to have a better score on all five holes after your next two holes? *Explain* your reasoning.
58. **TX TAKS REASONING** Atoms consist of protons, electrons, and neutrons. A group of x protons has a charge of x . A group of x electrons has a charge of $-x$. Neutrons have a charge of 0.
- a. **Calculate** The total charge of an atom is the sum of the charges of its protons and electrons. Find the total charge of an atom that has 13 protons, 10 electrons, and 14 neutrons.
- b. **Interpret** An atom is an ion only when it has a positive or a negative total charge. Is the atom in part (a) an ion?
- c. **Explain** In an atom, only the number of electrons can change. Suppose an atom has a total charge of 5. For the atom not to be an ion, how should the number of electrons change? Your answer should include an algebraic equation that models the situation and an explanation of how you solved the equation.
59. **CHALLENGE** You sold three items in an Internet auction. The table shows the profit earned for each item. You now plan to sell a floor lamp. What is the least profit that you can earn on the lamp and have a positive total profit for the four items? *Explain* your answer.

Item	Profit (dollars)
Mantel clock	4.13
Framed mirror	-10.65
Metal lunch box	-5.87



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REVIEW

TAKS Preparation
p. 836;
TAKS Workbook

60. **TX TAKS PRACTICE** A rectangular prism has dimensions l , w , and h . Another rectangular prism has twice the volume of the first prism. Which of the following could be the dimensions of the second prism? **TAKS Obj. 8**
- (A) l, w, h (B) $l, 2w, 2h$ (C) $2l, 2w, 2h$ (D) $l, \frac{w}{2}, 4h$
61. **TX TAKS PRACTICE** Which of the following values of x and y give the greatest value of z if $z = x^2 - 2y + 106$? **TAKS Obj. 2**
- (F) $x = -5, y = 11$ (G) $x = 2, y = 0$
(H) $x = 3, y = -2$ (J) $x = 5, y = 8$

REVIEW

Lesson 1.1;
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