

Be sure to discuss to discuss Chung's statement, which is incorrect. Students may need to play out some examples to notice that it should be "For every \$1 the eighth grade plans to raise, the seventh grade plans to raise \$3." The numbers are reversed, which is a common error in writing ratio statements.



Assignment Guide for Problem 1.1

Applications: 1–2 | Connections: 35–40

Answers to Problem 1.1

- A.** All the claims are true except Chung's. Reasoning will vary. Check students' work.
- B.** Answers will vary. Possible answers: The eighth-grade goal is $\frac{1}{3}$ of the seventh-grade goal. For every \$10 the 3 eighth graders plan to raise, the seventh graders plan to raise \$30. The seventh-grade goal is \$300 more than the eighth-grade goal.
- C.** The teachers' goal is \$360. One way to know this is that the teachers' goal is more than each of the two grades (\$210 more than one grade, and for every \$60 the teachers plan to raise, one grade is raising only \$50). That means the teachers' goal is less than the seventh-grade goal; in fact it is $\frac{4}{5}$ of the seventh-grade goal. Four-fifths of \$450 is \$360.