

j. $-8.1 \cdot (-1)$

k. $1 \cdot (-6)$

l. $-2\frac{1}{2} \cdot 1$

10. Tell whether each product is greater than or less than zero.

a. $5 \cdot (-7)$

b. $-3.2 \cdot 1.5$

c. $10.5 \cdot (-4)$

d. $-2 \cdot (-3) \cdot (-1)$

e. $-\frac{2}{3} \cdot 2\frac{3}{4}$

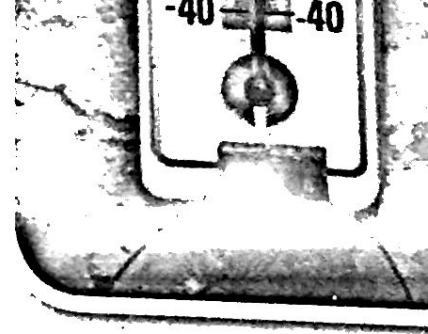
f. $-\frac{3}{4} \cdot \left(-1\frac{5}{6}\right) \cdot \left(-\frac{7}{4}\right)$

g. $-\frac{3}{4} \cdot \left(-1\frac{5}{6}\right) \cdot \frac{7}{4}$

h. $-\frac{3}{4} \cdot \left(-1\frac{5}{6}\right) \cdot \left(-\frac{7}{4}\right) \cdot \left(-2\frac{3}{8}\right)$

i. $\frac{3}{4} \cdot \left(-1\frac{5}{6}\right) \cdot \frac{7}{4} \cdot \left(-2\frac{3}{8}\right)$

j. $\frac{3}{4} \cdot 1\frac{5}{6} \cdot \frac{7}{4} \cdot \left(-2\frac{3}{8}\right)$



- 38.** The Extraterrestrials have a score of -300 . They answer four 50-point questions incorrectly. What is their new score?
- 39.** The Super Computers answered three 100-point questions incorrectly. They now have 200 points. What was their score before answering the three questions incorrectly?
- 40.** A football team is at its own 25-yard line. In the next three plays, it loses an average of 4 yards per play. Where is the team after the three plays?
- 41.** A new convenience store wishes to attract customers. For a one-day special, the store sells gasoline for $\$.25$ per gallon below its regular cost per gallon. Suppose the store sells 5,750 gallons of gas that day. What is the store's profit or loss in comparison to the amount the store would have made without the special?

- 54.** To add $5 + 3 + 2$, you might think that it is easier to add the $3 + 2$ and then add the answer to the 5. The mathematical property that allows you to change the grouping of addends (or factors) is called the *Associative Property*.

Test the Associative Property for addition and multiplication of integers by simplifying the expressions below. Find the values within the parentheses first. When you need a grouping symbol like parentheses inside another set of parentheses, you can use brackets to make it easier to read. For example, $(4 - (-6))$ can be written as $[4 - (-6)]$.

- a. $[3 \cdot (-3)] \cdot 4$ and $3 \cdot (-3 \cdot 4)$
- b. $(-5 \cdot 4) \cdot (-3)$ and $-5 \cdot [4 \cdot (-3)]$
- c. $[-2 \cdot (-3)] \cdot (-5)$ and $-2 \cdot [-3 \cdot (-5)]$
- d. $(3 \cdot 4) \cdot (-5)$ and $3 \cdot [4 \cdot (-5)]$
- e. $[3 + (-3)] + 4$ and $3 + (-3 + 4)$
- f. $(-5 + 4) + (-3)$ and $-5 + [4 + (-3)]$
- g. $[-2 + (-3)] + (-5)$ and $-2 + [-3 + (-5)]$
- h. $(3 + 4) + (-5)$ and $3 + [4 + (-5)]$
- i. Does the Associative Property work for addition and multiplication of integers?