

NS7-86 Gains and Losses

1. Write a plus sign (+) if the net result is a gain. Write a minus sign (-) if the net result is a loss.
 - a) a gain of \$4 +
 - b) a loss of \$2
 - c) a gain of \$3
 - d) a gain of \$1 and a loss of \$4 -
 - e) a gain of \$4 and a loss of \$2
 - f) a loss of \$2 and a gain of \$3
 - g) a loss of \$5 and a gain of \$1
 2. Write each sequence of gains and losses using numbers and signs (+ and -).
 - a) a gain of \$3 and a loss of \$5 + 3 - 5
 - b) a loss of \$3 and a gain of \$7 - 3 + 7
 - c) a loss of \$5 and a gain of \$4
 - d) a gain of \$7 and a loss of \$6
 - e) a loss of \$6, a gain of \$9, a loss of \$3, then a gain of \$2 - 6 + 9 - 3 + 2
 - f) a gain of \$2, a gain of \$4, a loss of \$5, then a gain of \$1
 - g) a loss of \$4, a loss of \$7, a gain of \$9, then a gain of \$4
 - h) a gain of \$3, a loss of \$2, a loss of \$1, then a gain of \$4
 3. Decide whether each sequence of gains and losses is a net gain (+) or a net loss (-).
 - a) $+ 5 - 3$ +
 - b) $+ 3 - 5$
 - c) $- 4 + 3$
 - d) $- 6 + 1$
 - e) $+ 9 - 8$
 - f) $+ 6 - 9$
 - g) $- 3 + 6$
 - h) $- 1 + 34$
 - i) $- 8 + 35$
 4. How much was gained or lost overall? Use + for a gain, - for a loss, and 0 for no gain or loss.
 - a) $+ 6 - 5 =$ + 1
 - b) $- 4 + 3 =$
 - c) $+ 5 - 5 =$
 - d) $- 6 + 6 =$
 - e) $- 3 + 5 =$
 - f) $+ 7 - 11 =$
 - g) $+ 4 + 2 =$
 - h) $- 3 - 1 =$
 - i) $- 6 - 2 =$
 - j) $- 6 + 2 =$
 - k) $+ 6 - 2 =$
 - l) $+ 6 + 2 =$
 - m) $+ 3 - 8 =$
 - n) $- 5 + 2 =$
 - o) $+ 9 - 4 =$
 - p) $- 5 + 7 =$
 - q) $- 3 + 3 =$
 - r) $+ 8 - 87 =$
 5. Group the gains (+'s) together and the losses (-'s) together. Then write the total gain and the total loss.
 - a) $+ 4 - 3 + 2 =$ $+ 4 + 2 - 3$
 $= + 6 - 3$
 - b) $- 3 + 4 - 2 =$
 - c) $- 6 + 8 - 4 =$
 - d) $+ 9 - 6 + 2 =$
- BONUS ▶** $- 3 + 4 + 2 - 1 - 5 + 4 + 1 + 2 - 3 =$

6. Circle all the gains first. Then group the gains (+'s) and losses (-'s). Then say how much was gained or lost overall.

a) $+7 - 6 + 2 =$
 $=$
 $=$

b) $+5 - 7 + 4 =$
 $=$
 $=$

c) $-5 - 1 \text{ } (+3) - 2 \text{ } (+4) \text{ } (+6) - 4 =$
 $= +3 + 4 + 6 - 5 - 1 - 2 - 4$
 $= +13 - 12$
 $= +1$

d) $+6 + 3 - 4 - 5 - 8 + 2 - 1 =$
 $=$
 $=$

e) $-4 + 5 + 6 - 3 - 2 + 8 - 5 + 1 - 4 =$
 $=$
 $=$

When the same number is gained and lost, the two numbers add 0 to the expression, so we can cancel them.

7. Cancel the numbers that make 0. Then write the total gain or loss.

a) ~~-3~~ $+7 + 3 =$ $+7$

b) $-5 - 2 + 5 =$ 0

c) $+3 + 4 - 3 =$ 4

d) $-6 - 4 + 6 =$ 0

e) $-8 + 7 + 8 =$ 7

f) $-4 + 4 + 2 =$ 2

g) $+3 + 5 - 5 =$ 3

h) $-8 - 6 + 6 =$ -8

i) $-7 - 8 + 7 =$ -8

j) $+8 - 3 + 4 + 3 - 4 =$ 8

k) $-3 + 4 + 2 + 3 - 2 =$ 4

l) $-8 + 8 - 6 + 7 - 7 =$ -6

m) $-4 - 3 + 2 + 3 - 2 =$ -3

n) $-5 - 4 + 4 - 3 + 5 =$ -1

o) $+6 - 5 - 6 - 2 + 5 =$ -2

p) ~~-3 + 2~~ $+4 - 5 - 2 + 6 + 3 - 6 =$ $+4 - 5$
these cancel $=$ -1

q) $-5 + 2 + 6 - 2 + 3 + 4 + 5 - 3 =$ 10

r) $+8 - 10 - 4 + 7 - 2 + 10 - 7 - 4 =$ -1

s) $-4 - 3 + 2 - 7 + 4 + 2 + 3 =$ -4

$=$ -4

8. Find the mistake in the cancelling. Circle the two numbers that should not have been cancelled.

~~-3 + 4 + 2 + 6 - 2 + 3 + 4 - 7 + 7 = +6~~