

# **INTEGER OPERATIONS**

### **EXTENDED LEARNING**

 The table below shows the number of yards gained or lost due to plays or penalties in each play of a Houston Texans' possession during a game. If yards are lost during a play, the number is recorded as a negative number.

PLAY	1	2	3	4	5	6	7	8	9	10	11
YARDS GAINED	3	1	9	10	16	0	40	-2	0	3	-9

The net yards gained is calculated by determining the sum of the yards gained for each play of the possession. Calculate the net yards for the plays shown above.

#### 71 Net Yards

2. The Houston Texans last played in Green Bay, Wisconsin on December 4, 2016. One of the coldest games ever played in Green Bay was in 1967 when the temperature was -13 degrees. The average December temperature in Houston is 54 degrees. What is the difference between the historically low temperature in Green Bay and the average Houston temperature in December?

54-(-13) 67 degrees difference





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3.If an opposing team's quarterback is tackled by a defensive player on the Houston Texans while their quarterback still has possession of the football, it is called a sack. During one game, the average yards gained by the opposing team (to the nearest integer) when the Texans sacked the opposing team's quarterback is -7 yards. This means that the team loses 7 yards on average each time their quarterback is sacked. If this average continues, what will be the average yards gained/ lost by the opposing team due to sacks if the Texans sack their quarterback 3 times in a game?

### 3(-7 yards)

-21 yards

4. On a typical gameday, the kitchen at NRG stadium prepares 8,000 hot dogs. Two hundred hot dogs are discarded for quality reasons each game. The kitchen records a loss of -\$600 for each game due to discarding these hot dogs. What is the loss for each hot dog?

### -\$600/200 = \$-3 There is a loss of \$3 for every hot dog discarded

### ENRICHMENT

The Ball Possession and Drive Chart from each Stats Report includes the net yards that the team has gained or lost at the end of each possession. Choose a Stats Report and study the chart. What was the total number of net yards for the Houston Texans? For the opposing team?

