## ADD AND SUBTRACT INTEGERS APPLICATIONS NEGATIVE NUMBERS

Q1. Bull is a football fullback. Sometimes he gains yardage ( +5 means a five-yard gain). Sometimes he loses yardage ( -8 means an eight-yard loss).
(a) Determine Bull's total yardage in each of these games.

Game 1: $\quad+3,+5,+6,+1,+13$
Game 2: $\quad-2,-6,-1,-2,-4$
Game 3: $\quad-4,+4,-3,+3,+10,-13$
Game 4: $\quad-5,+3,+6,-2,+8,-6,+9,-1$
Game 5: $\quad+6,-7,-5,+10,-3,-8,+5,-10,+8$

(b) In game 6, Bull's total yardage was -16 yards for 8 carries. Show how this is possible if the yardage for each carry was different.
(c) In the final game, Bull's first seven carries were $-3,+6,+4,-3,-7,+3,-2$. How much would he have to gain on his eighth carry to have a positive total?

Q2. Tony made two 6 -sided dice with these numbers on each of them:
$-3, \quad-2, \quad-1, \quad 0, \quad 1, \quad 2$
Suppose the pair of dice is tossed.


The diagram below shows three ways of getting a sum of 2 .


List one way to get a sum of: (a) - $4 \quad$ (b) 0

## ANSWERS

Q1. (a) $+28,-11,-3,+12,-4$
(b) +3

Q2.(a) -2 and $-2,-1$ and -3
(b) -2 and $2,-1$ and 1

