Simplify. 2/26

$3 + 7(10 - x) - (x - 20)$

$3+7(10+-x)+-1(x+-20)$

$3+70+-7x+-x+20$

$-8x+93$ or $93-8x$ or $93+-8x$

4 Suites:
Diamonds Hearts Spades Clubs

A 2 3 4 5 6 7 8 9 10 J Q K

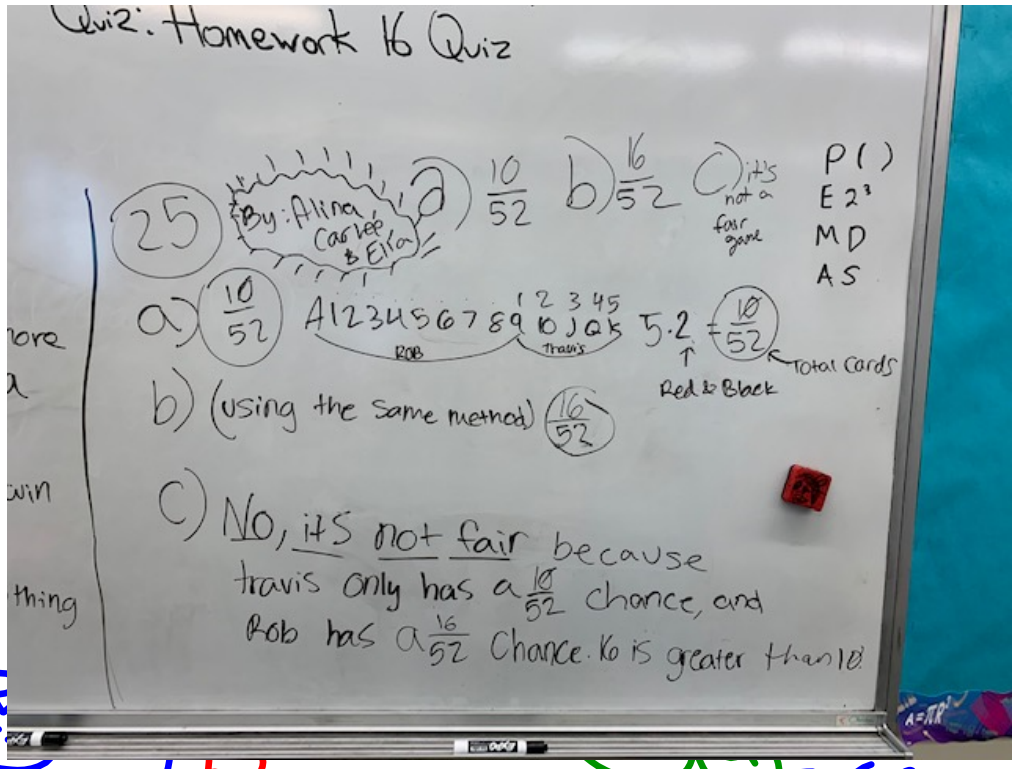
A 2 3 4 5 6 7 8 9 10 J Q K

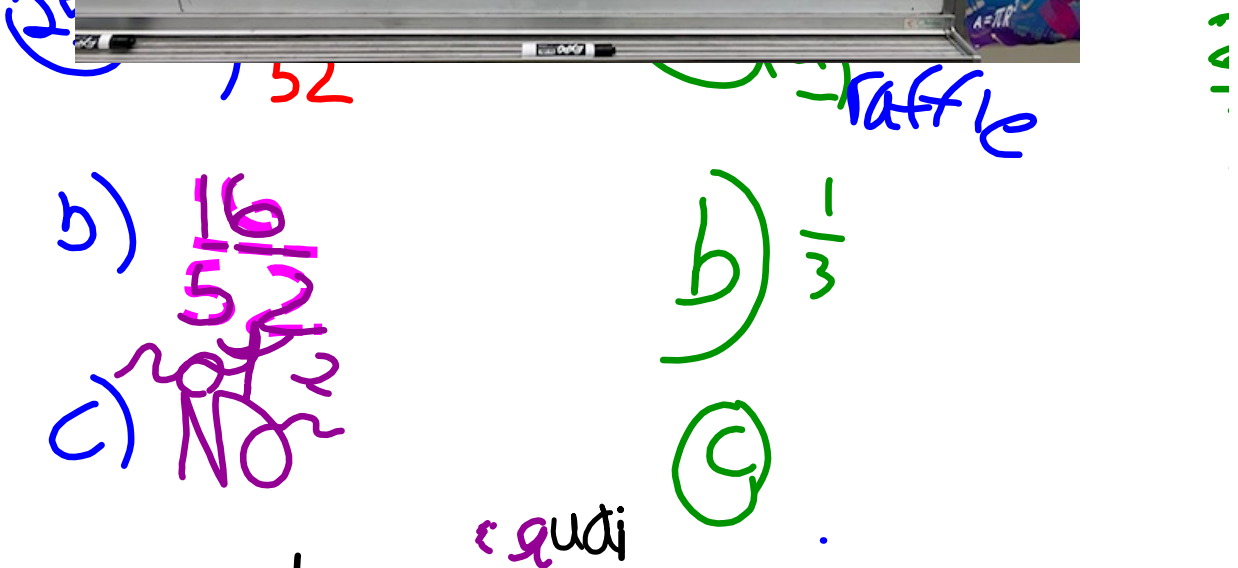
5-25. Rob decided to play a card game with his friend, Travis. He told Travis that if he picked a black card with a value of nine or greater, Travis would win. (Jacks, queens, and kings are considered to be greater than nine.) If Rob picked a red card with a value of less than nine, Rob would win. (Aces are considered to have the value of one in this case.) Write your probabilities as a **fraction**.

a. What is the probability that Travis will win?

b. What is the probability that Rob will win?

c. ~~According to the definition in the introduction to this lesson~~, is this a fair game? Why or why not?





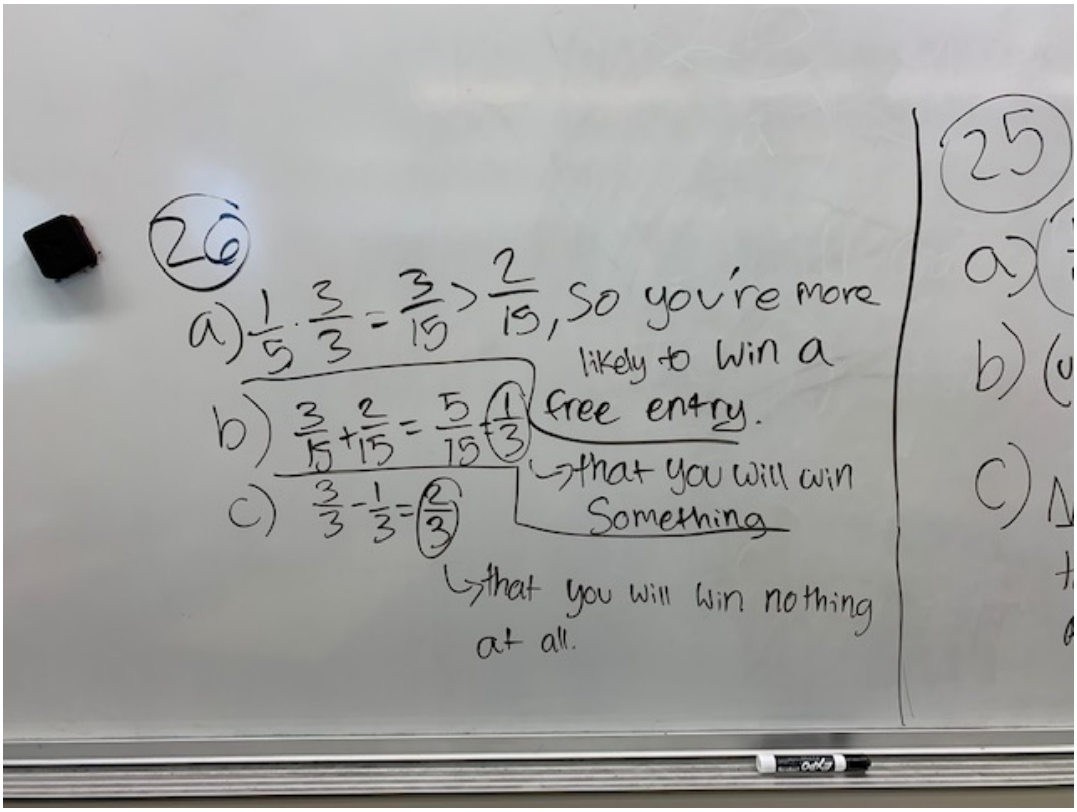
5-26. The city has created a new contest to raise funds for a big Fourth of July fireworks celebration. People buy tickets and scratch off a special section on the ticket to reveal whether they have won a prize. One out of every five people who play get a free entry in a raffle. Two out of every fifteen people who play win a small cash prize.

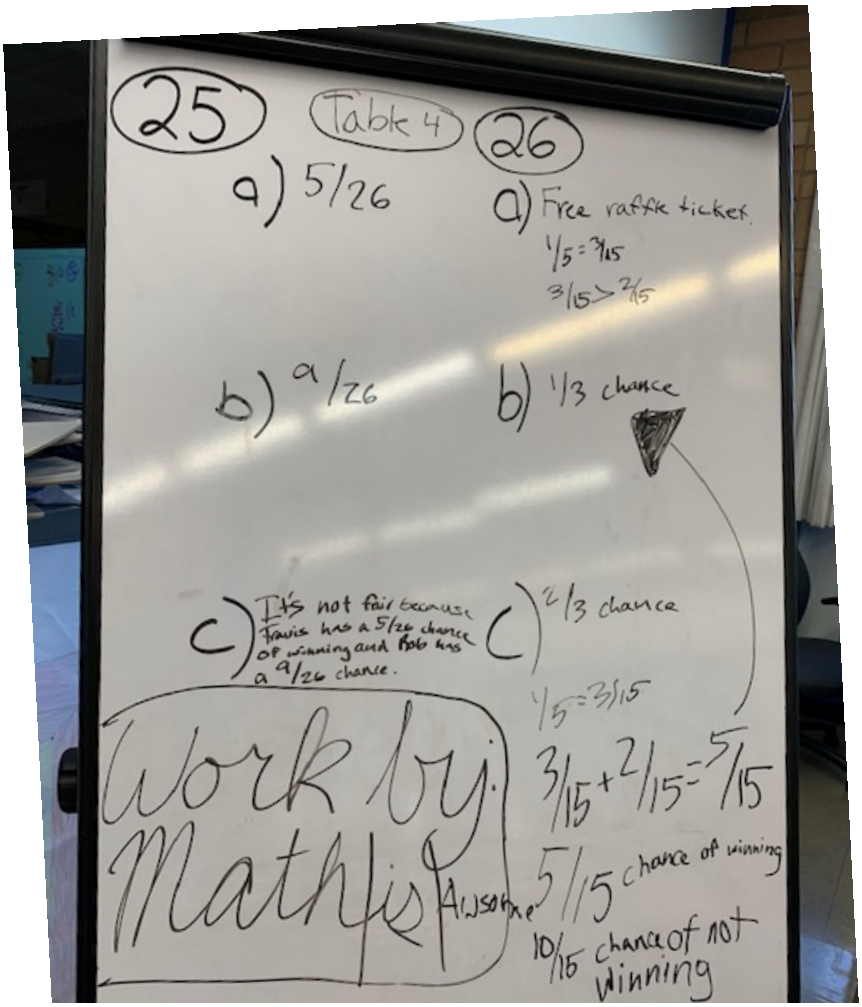
A ticket can't have both prizes. Write your probabilities as a **fraction**.

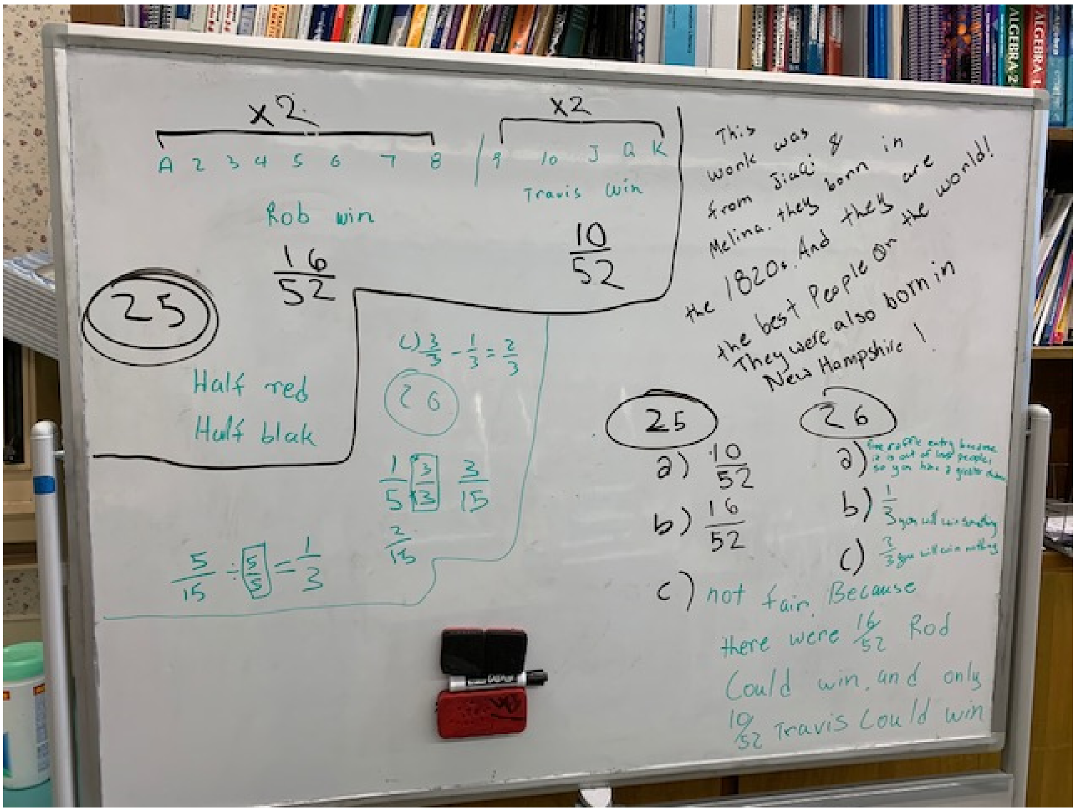
a. If you buy a scratch-off ticket, is it more likely that you will win a free raffle ticket or a cash prize? Explain your answer.

b. What is the probability that you will win something (either a free raffle entry or a cash prize)?

c. What is the probability that you will win nothing at all? To justify your thinking, write an expression to find the complement of winning something.




25
Table 4
26
a) 5/26
a) Free raffle ticket.
1/5 = 3/15
3/15 > 2/15
b) 9/26
b) 1/3 chance
c) It's not fair because Travis has a 5/26 chance of winning and Bob has a 9/26 chance.
c) 1/3 chance
1/5 = 3/15
3/15 + 2/15 = 5/15
Work by Math is Awsome
5/15 chance of winning
10/15 chance of not winning


x2
A 2 3 4 5 6 7 8
x2
9 10 J Q K
Travis win
Rob win
16/52
10/52
25
Half red
Half blak
26
This work was from Jiaqi & Melina. they born in the 1820s. And they are the best People On the world!
They were also born in New Hampshire!
25
a) 10/52
b) 16/52
c) not fair. Because there were 16/52 Rod Could win, and only 10/52 Travis Could win
26
a)
b) 1/3
c) 3/3
5/15 ÷ 5/5 = 1/3
1/5 3/3 3/15
2/15
c) 3/3 - 1/3 = 2/3