

Be sure your textbook is in class with you.

On last night's HW, give yourself a score and check it with the solutions

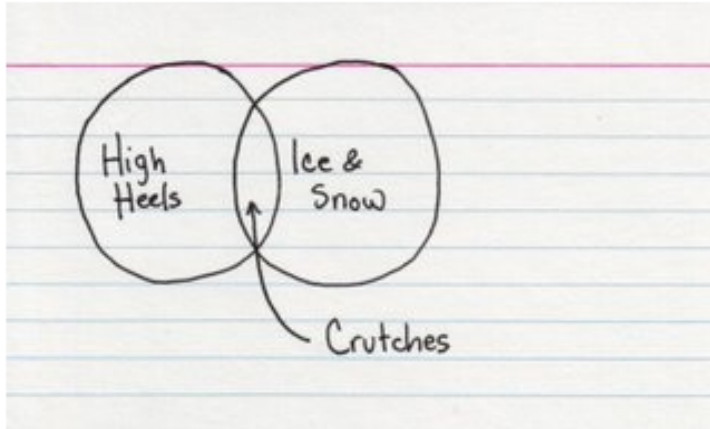


Target

Analyze
Venn Diagrams

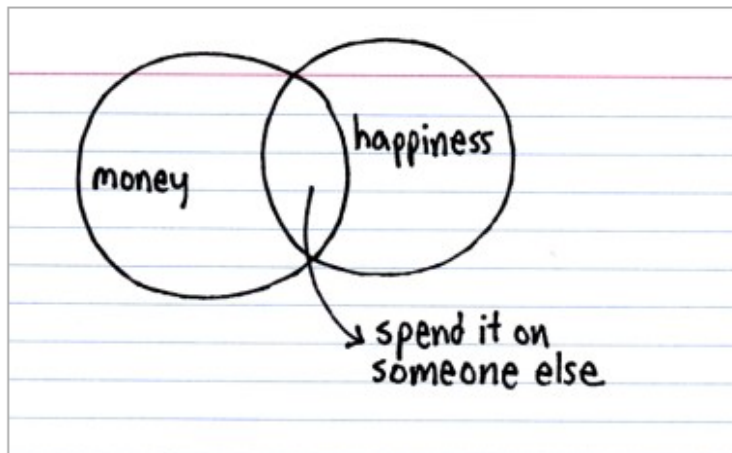
That cast is super trendy.

Posted on November 28, 2006 by Jessica Hagy



Behavioral economics.

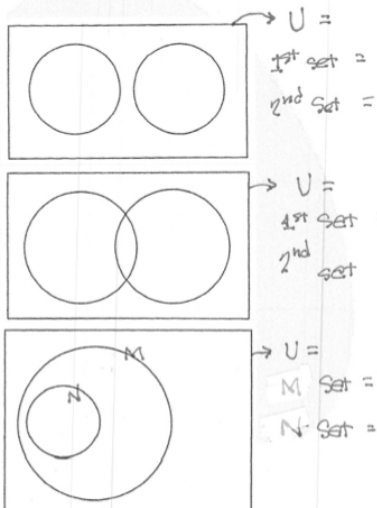
Posted on February 25, 2016 by Jessica Hagy



Pick up
the
classwork

Venn Diagrams

1. Consider and suggest what the sets could be in the reference also to what the universal set might be.



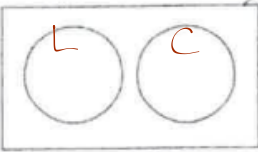
As a group, create
sets that match the
Venn Diagram

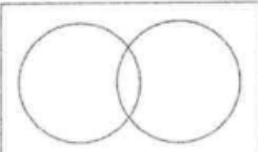
do

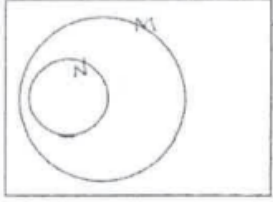
Classwork ^{day 2} ←

create Possible Sets from Venn Diagrams

1. Consider and suggest what the sets could be in the reference also to what the universal set might be.

a)  → U = U.S. citizens
1st set = Liberals
2nd set = CONSER

b)  → U = Students in IB math (Per 3)
1st set = Students with Brown hair
2nd set = Students with green eyes

c)  → U = Animals
N Set = Sea animals
M Set = Sharks

read about

Venn Diagrams, etc

pp. 73-74

read ↑

look at examples ↑

On page 75 of your text, Do #2
(on the bottom of your first sheet)

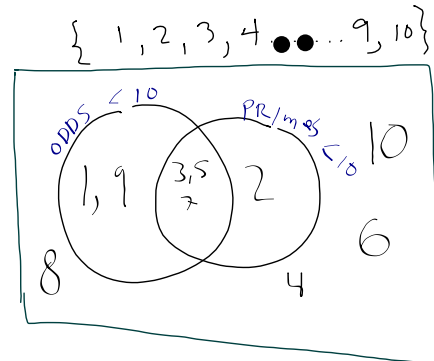
$$a) A = \{1, 3, 5, 7, 9\}$$

$$B = \{2, 3, 5, 7\}$$

$$b) A \cap B = \{3, 5, 7\}$$

$$A \cup B = \{1, 2, 3, 5, 7, 9\}$$

(c)



On page 75 of your text, Do #2
(on the bottom of your first sheet)

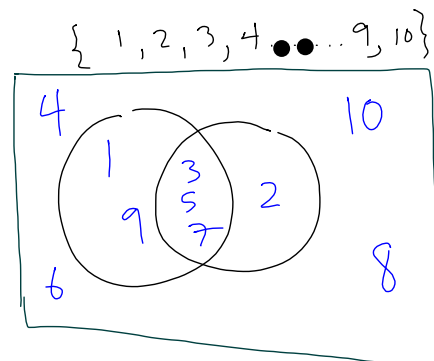
$$a) A = \{1, 3, 5, 7, 9\}$$

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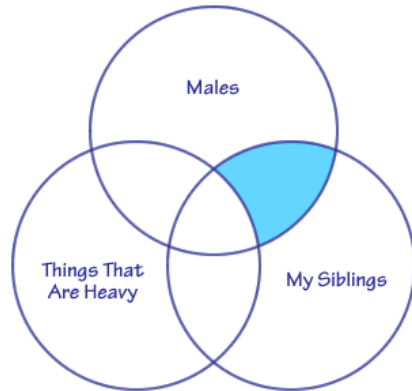
$$b) A \cap B = \{3, 5, 7\}$$

$$A \cup B = \{1, 2, 3, 5, 7, 9\}$$

(c)



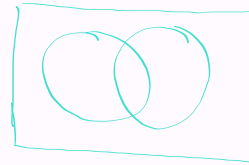
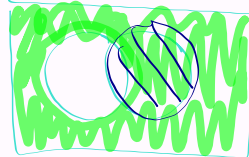
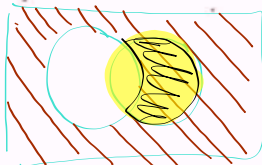
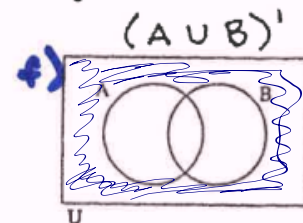
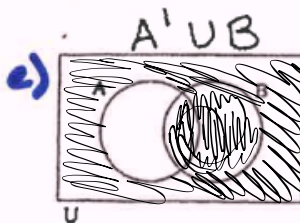
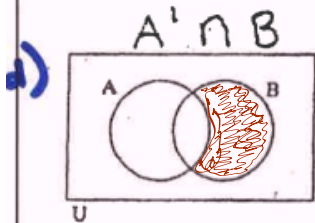
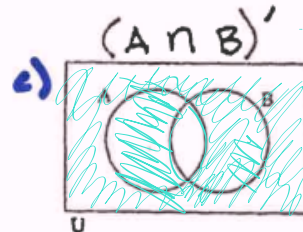
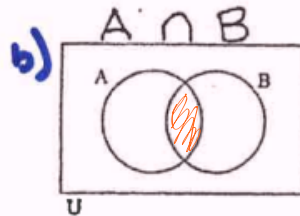
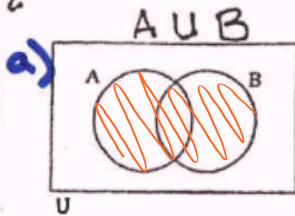
Shading of Venn Diagrams

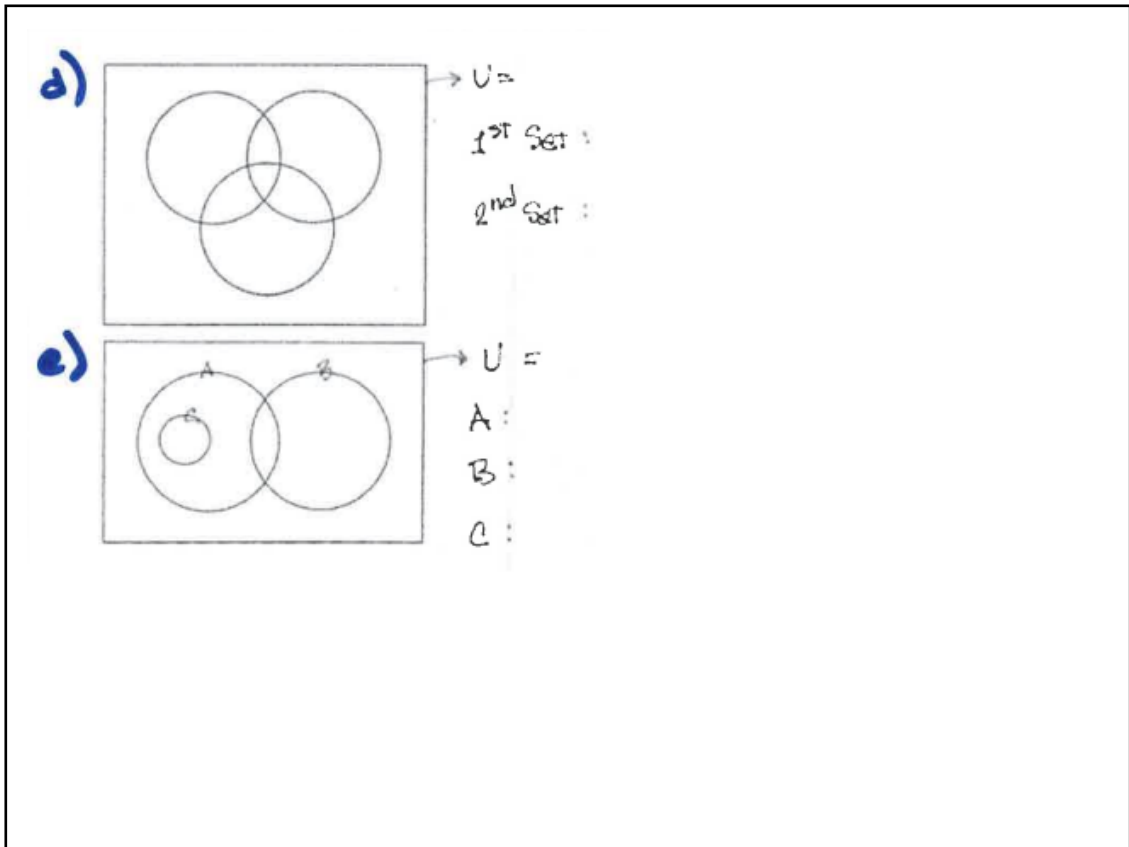
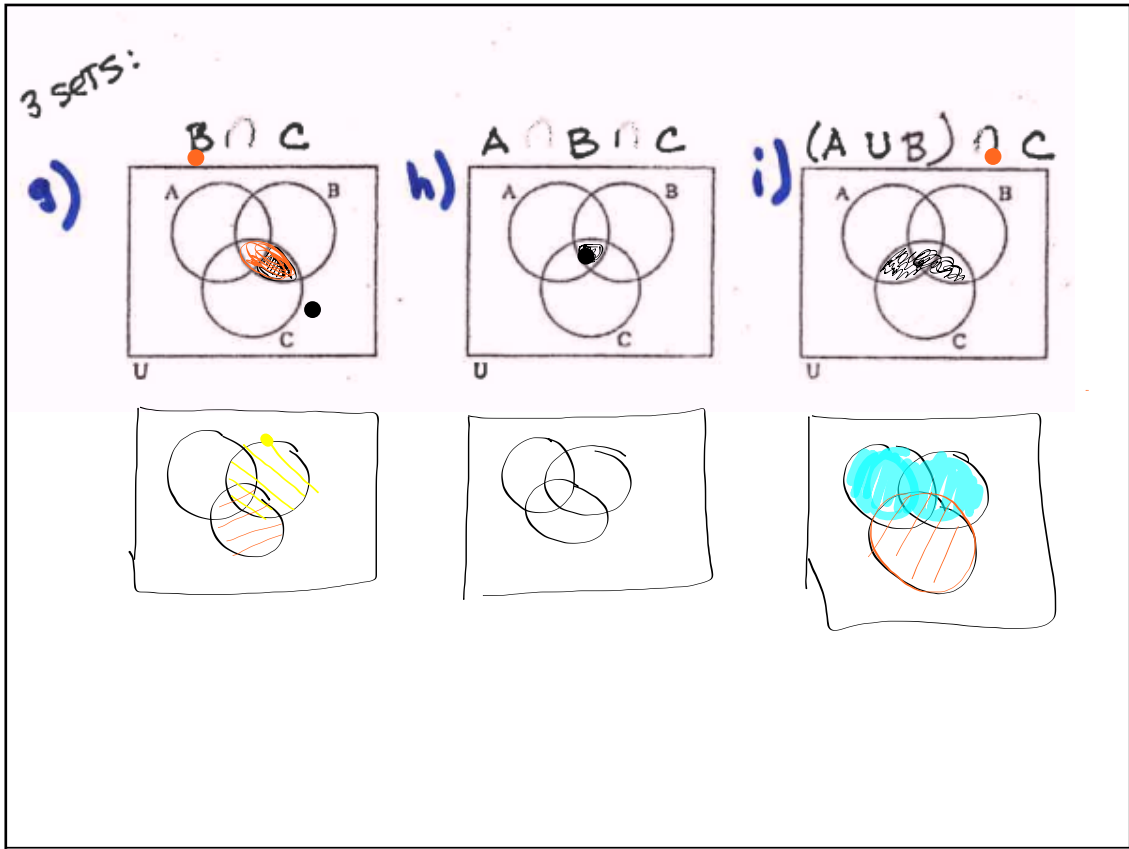


do #2 on the hand out

② Shading with Sets

2 sets:





37) Shading With Mutually Exclusive Sets

2 D sets

a) A'

b) $A \cup B$

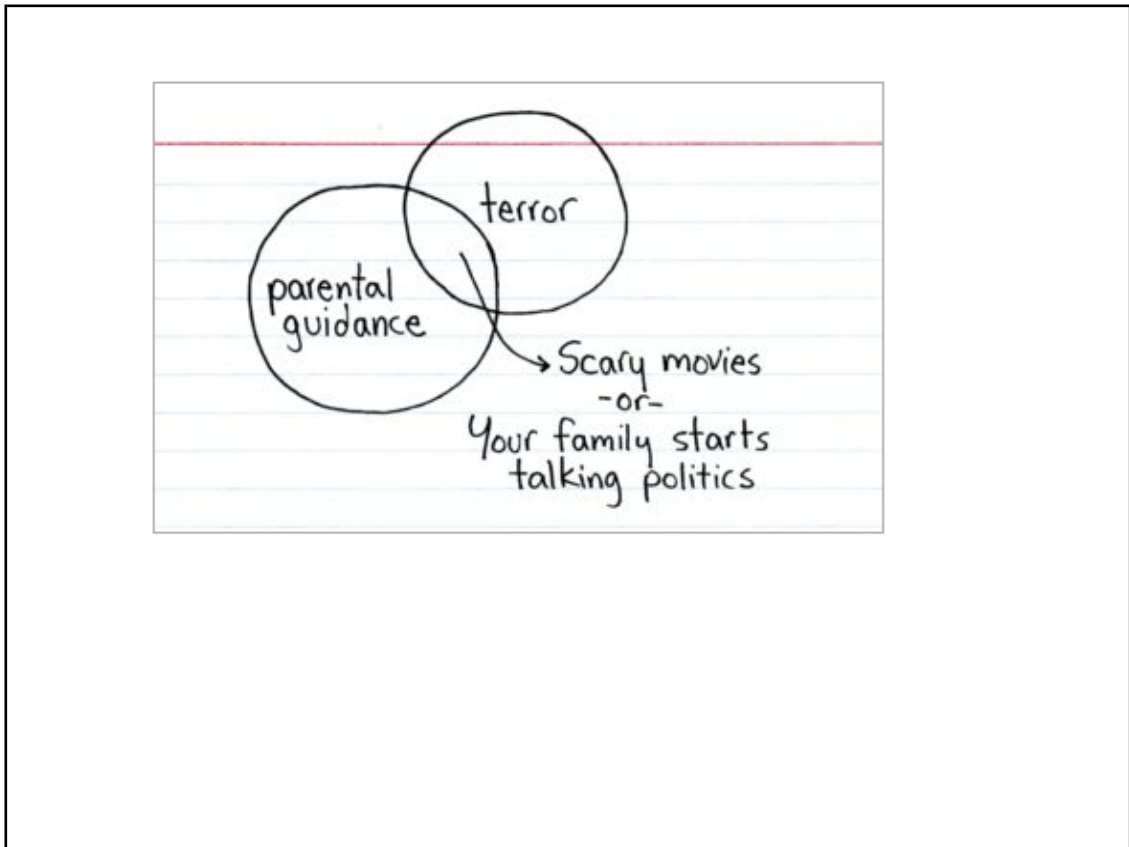
c) $A \cap B$

and with subsets

a) A'

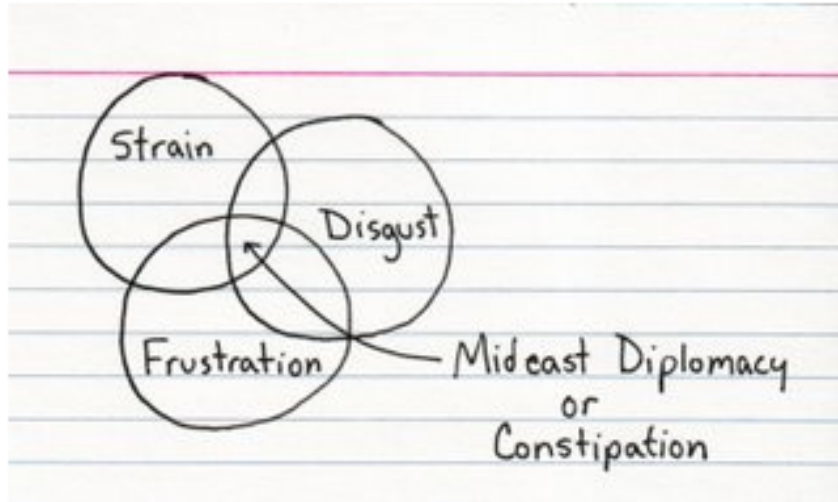
b) $A \cap B$

c) $A' \cup B$



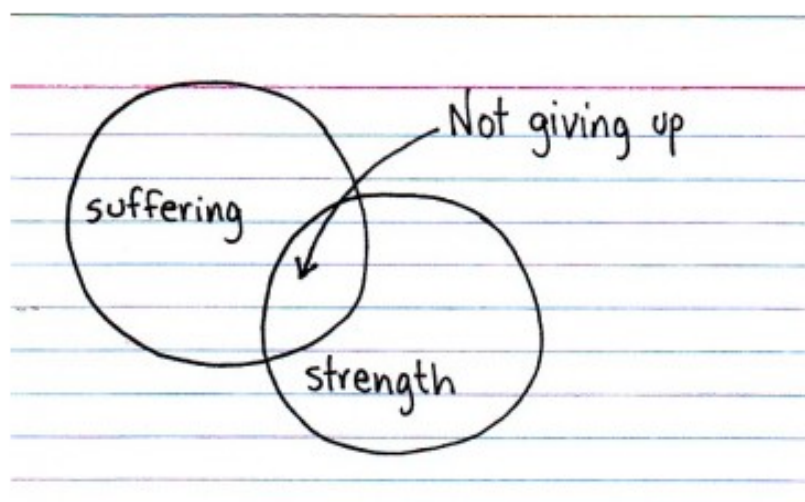
Something has to give.

Posted on August 31, 2006 by Jessica Hagy

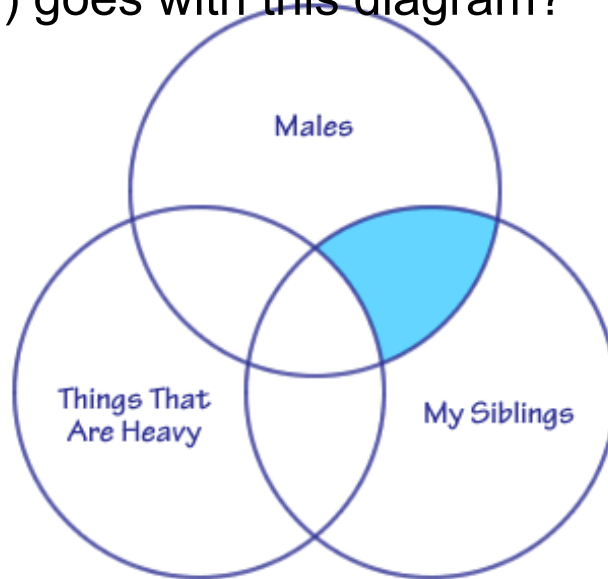


How to win.

Posted on May 20, 2011 by Jessica Hagy



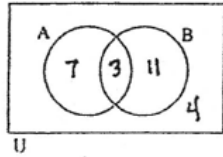
What songs (when your parents were young) goes with this diagram?



Numbers in Venn Diagrams

4

Numbers in Regions



If 3 means that there are 3 elements in the set $A \cap B$, how many elements are there in:

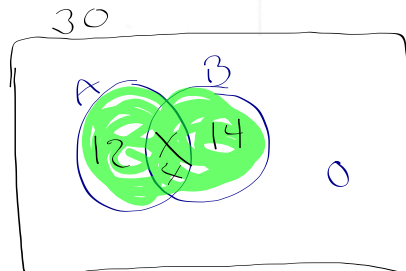
- a) A $n(A) = 7 + 3 = 10$
 b) B' $n(B') = 7 + 4 = 11$
 c) $A \cup B$ 21
 d) A but not B 7
 e) B, but not A 4
 f) neither A nor B 4

5.

Given $n(U) = 30$ $n(A) = 16$ $n(B) = 18$

$n[(A \cup B)'] = 0$

$n(A \cap B) = 4$



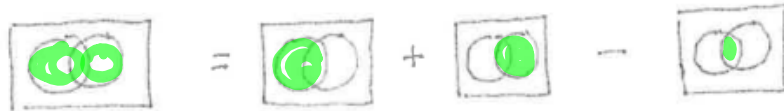
$30 = 16 + 18 - x$

Law of Combined Events (with Venn Diagrams)

6

Important
Union Property

$$n(A \cup B) = n(A) + n(B) - n(A \cap B)$$

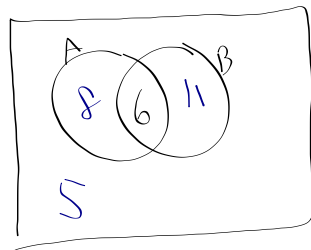


7

Given $n(U) = 30$ $n(A) = 14$ $n(B) = 17$
 $n(A \cap B) = 6$

find $n(A \cup B) = 25$

find $n(A, \text{ but not } B) = 8$



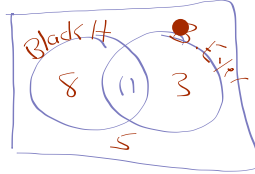
$$n(A \cup B) = n(A) + n(B) - n(A \cap B)$$

$$25 = 14 + 17 - 6$$

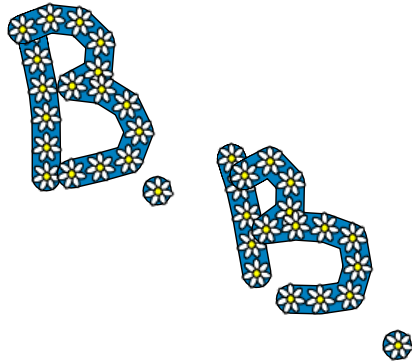
8

c) A tennis team has 27 members, 19 have black hair, 14 have brown eyes and 11 have both black and brown eyes.

a) Create a Venn Diagram with this information.



b) Find the number of members with :
 black hair or brown eyes ~~11~~ 22
 black hair, but not brown eyes. 8



We'll go over the test in just a few moments.

Assignment:

is a handout called "Assignment 3" you have 2 days to complete it.

