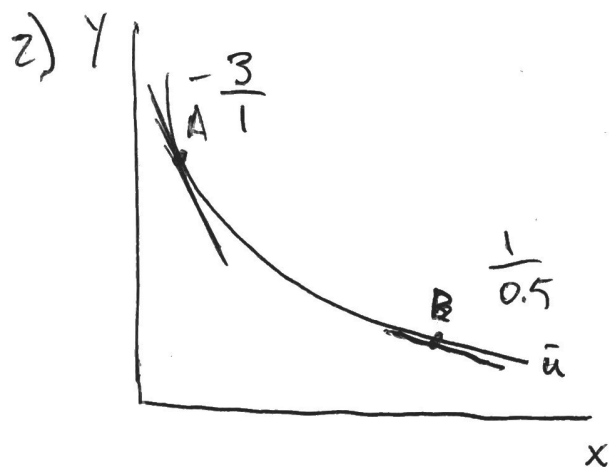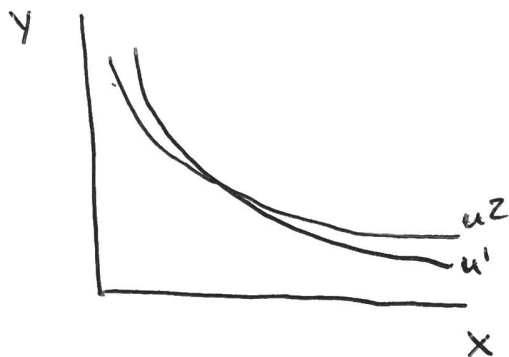1) Transitivity for indifference curves maintains the logical consistency of preferences.
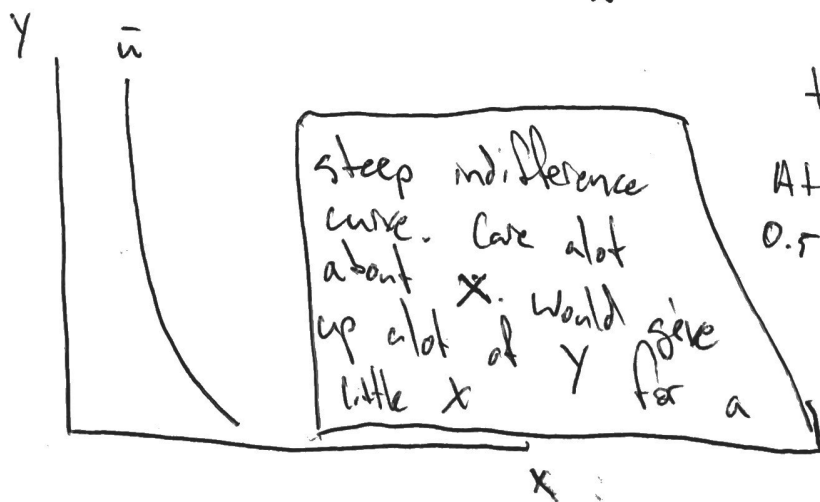
This means that indifference curves cant cross each other

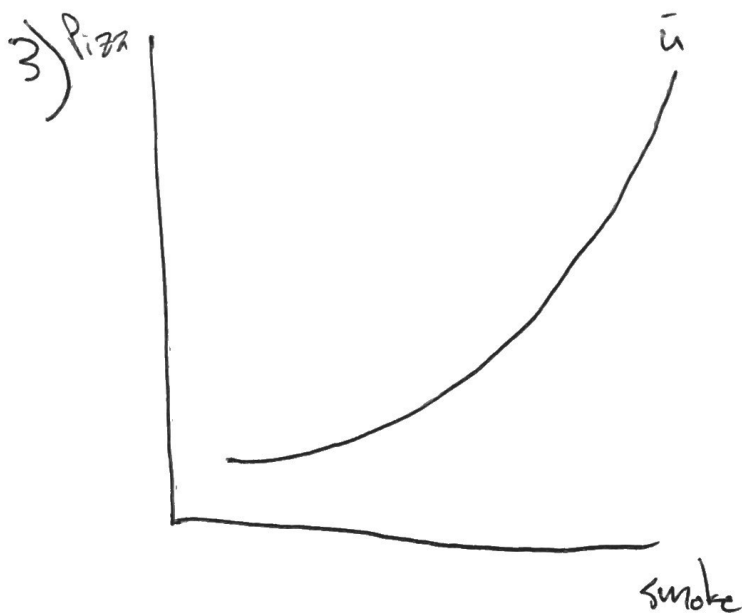
2)

The MRS tells us the tradeoff we'd be willing to accept between 2 goods (X,Y) and remain equally happy. At point A to get 1 X we'd be willing to give up 3 Y. At point B its a 1 to 0.5 relationship

steep indifference curve. Care alot about X. Would give up alot of Y for a little X

3) Pizza

smoke

To deal with more smoke, we'd need to be compensated with more pizza to be equally happy.

4) A) Marginal utility, is extra utility from another unit.

2 chairs, 2 couches = 7 utiles

3 chairs, 2 couches = 10 utiles
_____
3 marginal utility

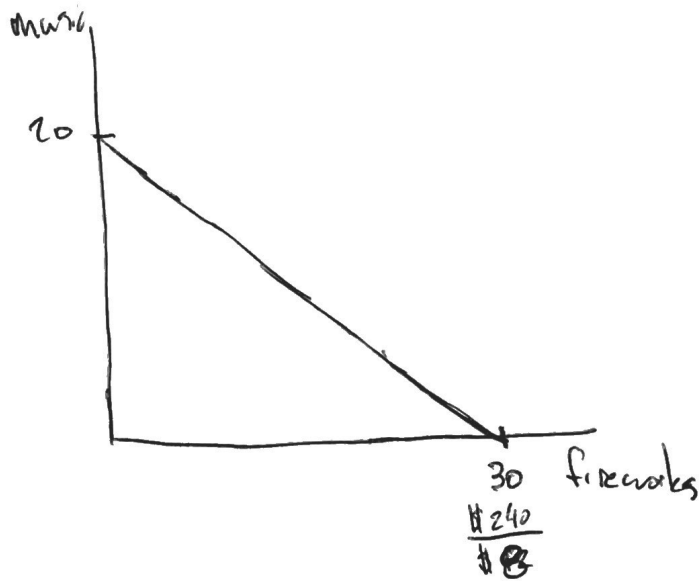B)

2 chairs, 2 couches = 7

2 chairs, 3 couches = 12
_____
5 marginal utility

Matt should buy a couch, because it hase the largest extra utility for the same price
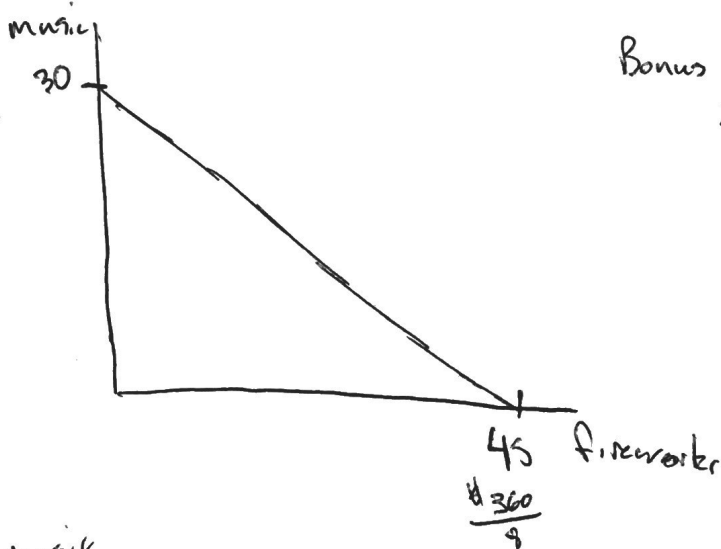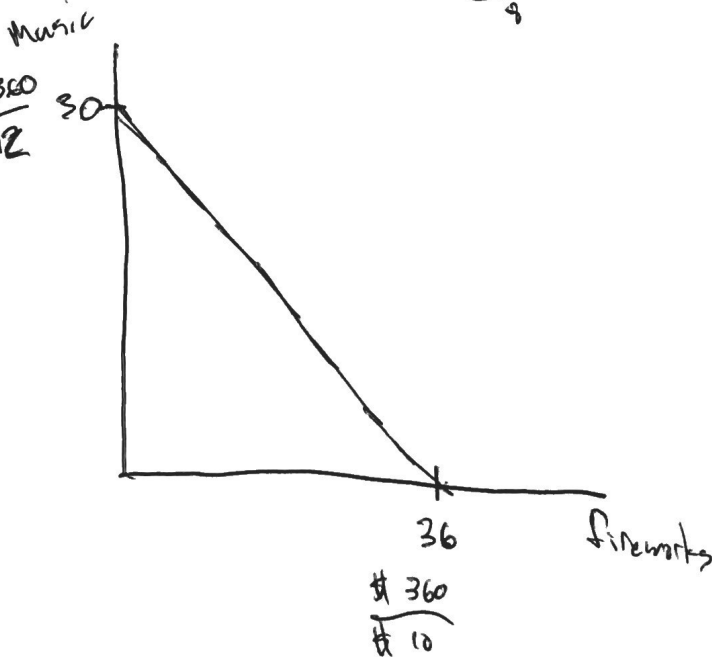
5) **A)**

$\dfrac{\$240}{\$12}$ 20 ┤

music

30   fireworks

$\dfrac{\$240}{\$8}$

B) $\dfrac{\$360}{\$12}$ 30 ┤

music

45   fireworks

$\dfrac{\$360}{8}$

Bonus with income up to
$360

C) $\dfrac{\$360}{\$12}$ 30 ┤

music

36   fireworks
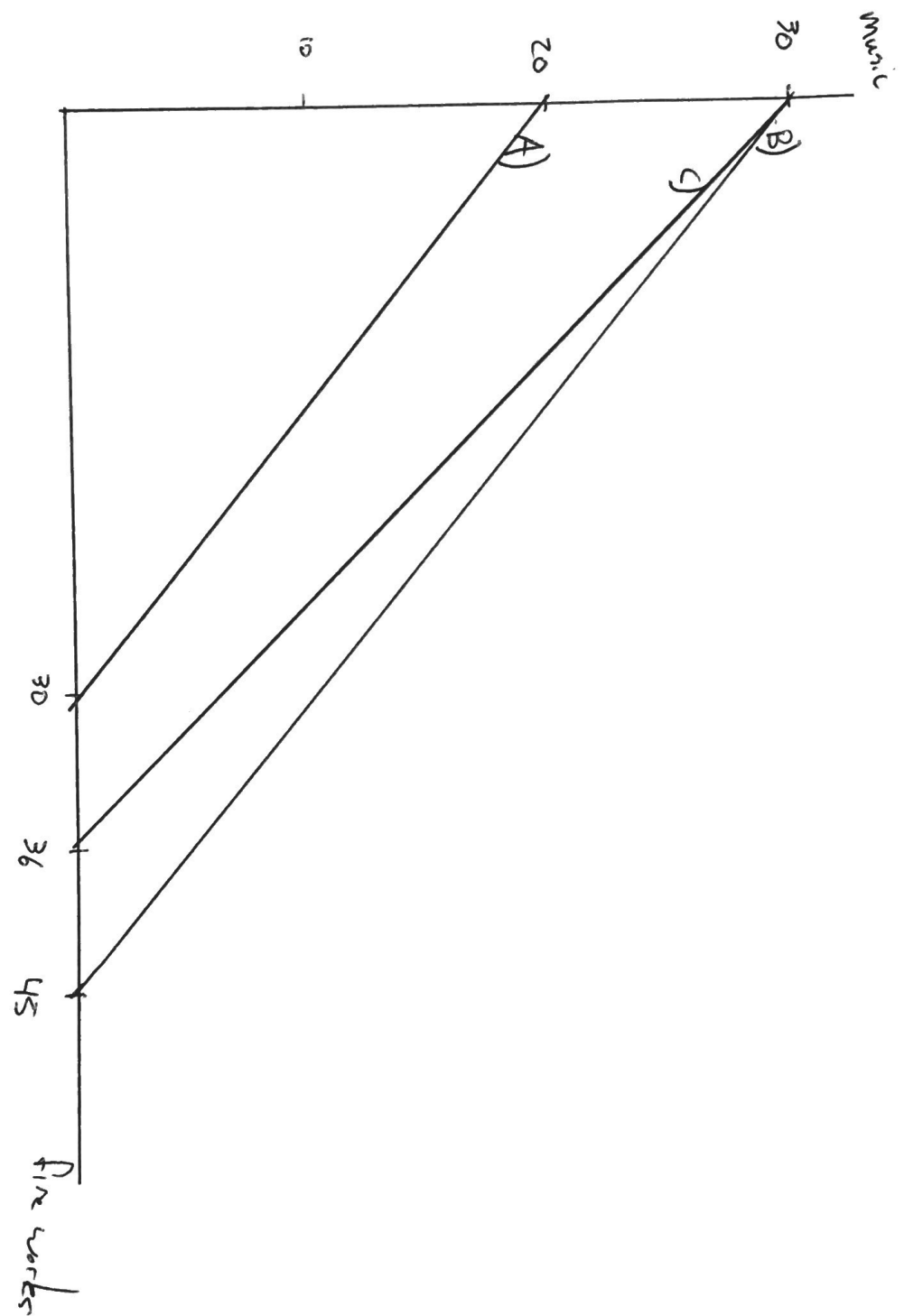
$\dfrac{\$360}{\$10}$

Bonus with income
at $360,
but fireworks price
at $10

5) Budget constraints on a single graph

6) A)

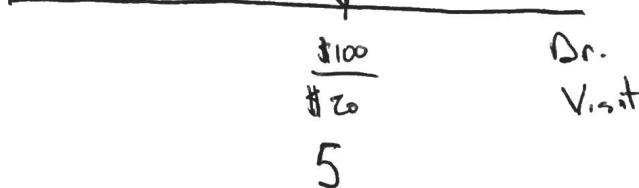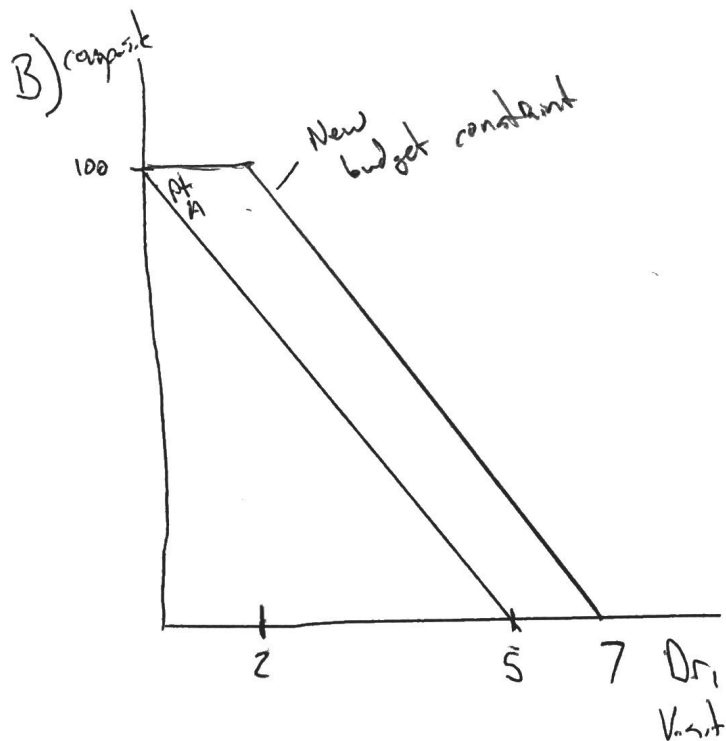Composite good

$100   100
————
$1

slope = $\dfrac{rise}{run}$ = $\dfrac{-Price\ Dr}{Price\ Composite}$ = $\dfrac{-20}{1}$

ie. reduce the composite by 20 units to gain 1 Dr. visit

$\dfrac{\$100}{\$20}$

5

Dr. Visit

4 - 50% coupons

B) composite

Plan A   2 free visits

100   — New budget constraint

Pt A

2   5   7   Dr. Visit

Plan B

composite

New budget constraint with kink

100

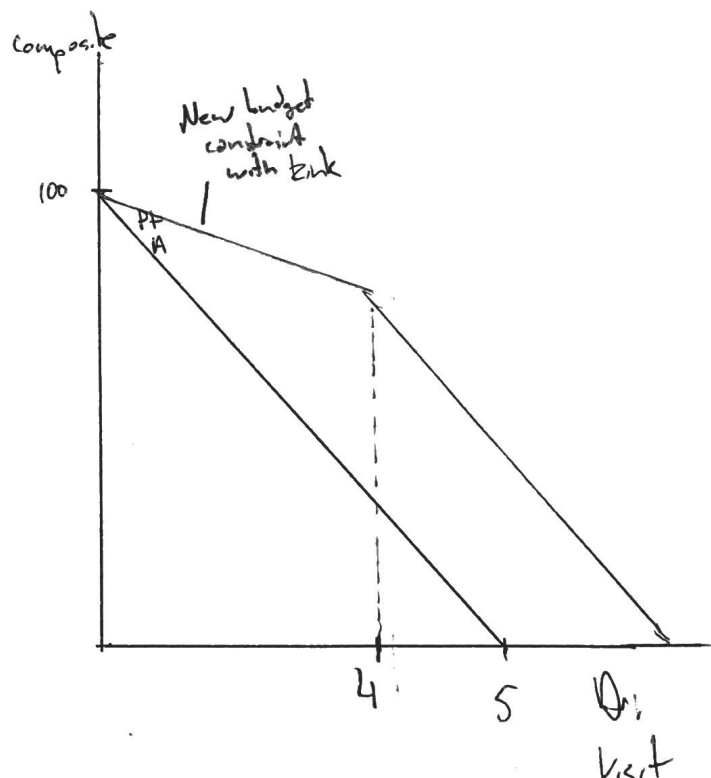PP A

4   5   Dr. Visit

C) Really healthy wants Plan A, gives most purchasing power. Could be in the flat part of the budget constraint.

7) For running long races and trail adventures

choice set : training mix
- long slow distance miles
- sprints / intervals
- heavy weight lifting
- body weight and Plyometrics

to maximize : place in the race
joy of the experience } Utility

Constraints : time

Physical load body can handle without
getting hurt