

Lucy  
3-12

has run  
had run

present perfect

to an

✓ past part.

mn

to break, broken is past participle

had	broken
has	broken
have	broken

52) namely  $\rightarrow$  specifically look at definitions of transition words

Ans: 30 50 36 51 53 60  
57 52 59 48 42

Some S recent  
(2018-2021)  
tests, unused,

55 58

55)  $(x-30)/13$

Math 2011 April 67F

51, 49, 48, 52, 53

55, 56

55)  $P(x)$   
 $P(y)$

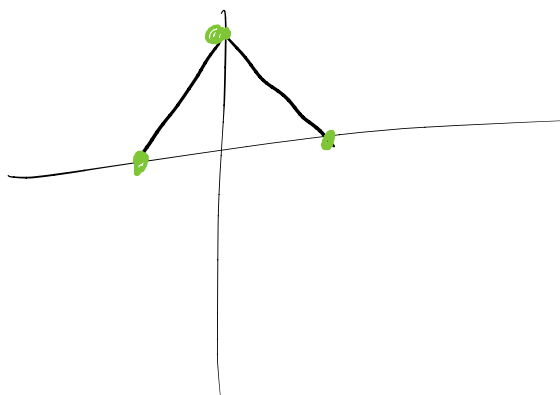
$C = (4, 0)$

$P(x, y) = 4x + 3y$

$P = P(C) = P(4, 0)$   
 $= 16$

2 inputs = 1 output

Look at the vertices



The max and min of  $P(x, y)$  are always at the vertices

56)  $-2 \leq x \leq 4$   
 $0 \leq y \leq 5 \Rightarrow QI \text{ and } QII$

60)  $a > b, (a-b) > a^2 - b^2 = (a+b)(a-b)$

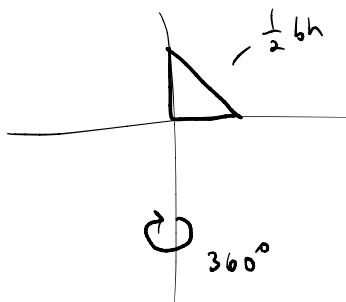
$\begin{matrix} (+) & & (+) \\ (a-b) & > & (a+b)(a-b) \end{matrix}$

$1 > a+b$

Take note of hints in the question, use all given information

$$\overset{(-)}{(a-b)} > \overset{(-)}{(a+b)(a-b)} <$$

51) A wouldn't have a flat base



Calculus  
2

What shape do you get when you rotate around y-axis  $360^\circ$ ?

cone

$\nearrow V_{\text{cylinder}}$

$$V = \frac{1}{3} \pi r^2 h$$

Calculus allows you to add up area of infinite triangles for volume of cone

52) F

3 4

number theory 46) K  $p < q$  Multiply by  $-1$   $|p| < |q|$

$$-p > -q$$

$$+p < +q$$

If  $p < q$

reciprocate both sides, raise to  $-1$  power

$$\frac{1}{p} > \frac{1}{q}$$

Let  $|p| = 3$   
 $|q| = 4$   
 $3 < 4$   
 but  $-3 > -4$

p positive, q positive

$$-p > -q$$

p negative  
 q negative