

3-12

28) { has, had, have } + past participle
forms perfect tense a particular conjugation

has run
had run

present perfect

to run

✓ past part.

run

to break, broken is past participle

had broken
has broken
have broken

52) namely → specifically look up definitions of
transition words

Ans: 30 50 36 51 53 60
57 52 59 78 72

Some 5 recent
(2018-2021)
tests, unused,

55 58

$$55) (x-30)/13$$

Math 2011 April 67F

51, 49, 48, 52, 53

55, 56

$$55) \begin{matrix} P(x) \\ P(y) \end{matrix}$$

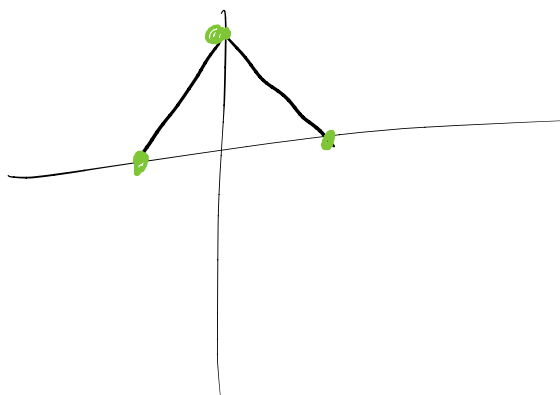
$$c = (4, 0)$$

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

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

2 inputs = 1 output

Look at the vertices



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

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

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

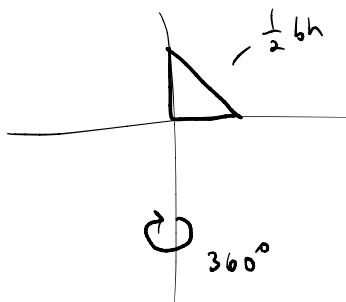
$$\begin{matrix} (+) & (+) \\ (a-b) & > & (a+b)(a-b) \end{matrix}$$

$$1 > a+b$$

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° ?

cone

$$V = \frac{1}{3} \pi r^2 h \quad \uparrow V_{\text{cylinder}}$$

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