10000

A	240	$I^A I^A / I^A i$	= 24%
B	210	$I^B I^B / I^B i$	= 21%
O	500	11	= 50%
AB	50	$I^A I^B$	= 5%

406,000

$p = \sqrt{A+O} - \sqrt{O}$

$= \sqrt{0.24 + 0.5} - \sqrt{0.5}$

$= 0.15$

$q = \sqrt{B+O} - \sqrt{O} = 0.135581$

$r = \sqrt{O} = \sqrt{0.5}$

$AB = 0.040657$

$2pr / p^2$

$2pr = 0.216$

$\frac{3\sqrt{2}}{20} = 0.234634$

1000

R B ——

r B —

M M ——

m M —

R_ mm	Nash	400
R_ M_		45
rr mm		55
rr M_		400

RrMm RrMm

RRMm RrMm

Rr RR Mm mm

AA aa

Aa Aa

AA Aa aa

1 2 1

AaBb

aabb

Aa

aa

Bb

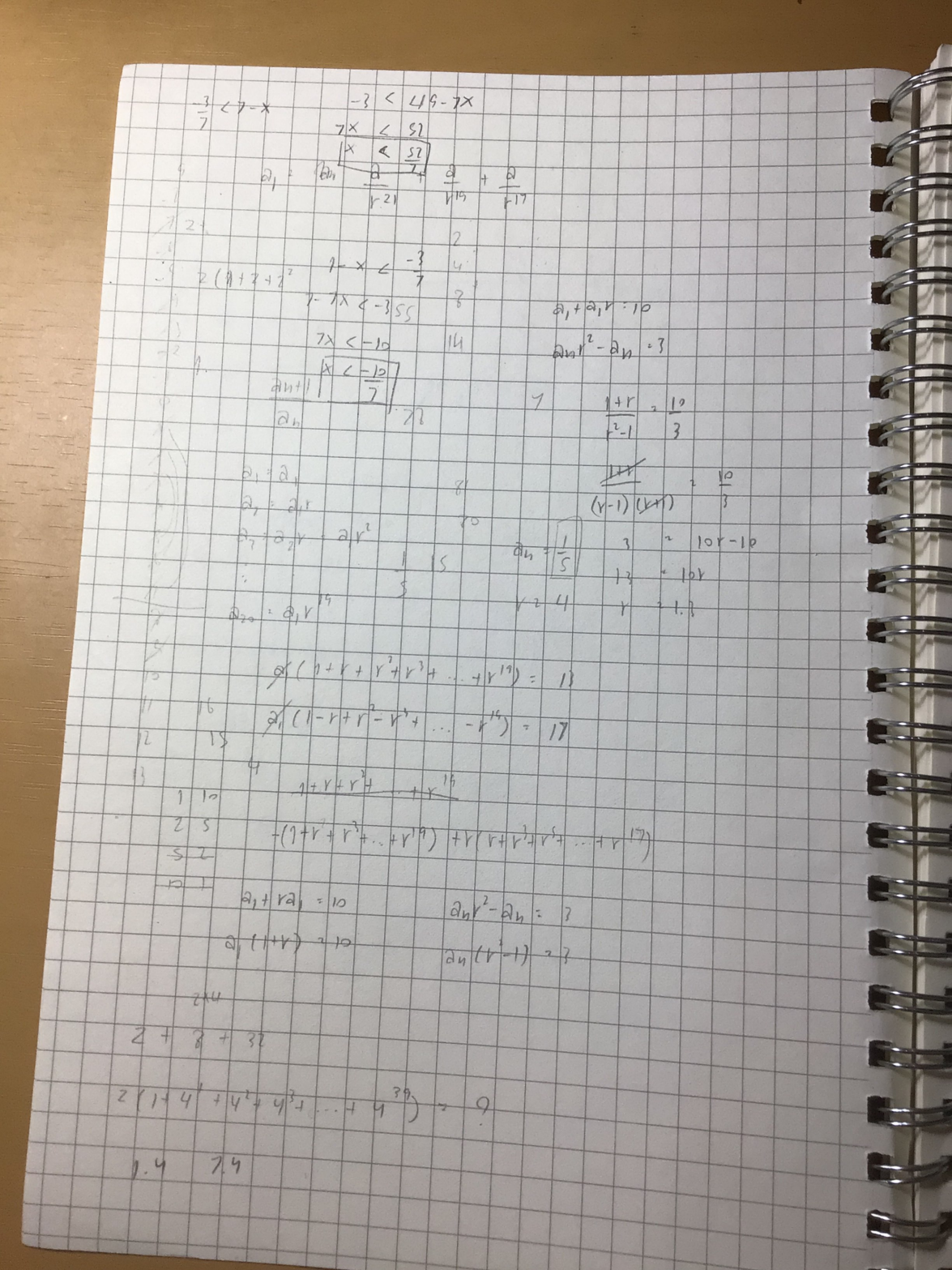
bb

AaBb

Aabb

aaBb

aabb



$a_1(1+r) = 10$

$a_n(r^2-1) = 3$

$a_n = 1 \to r = 2$

$2 \to r^2$

$3 \to r = \sqrt{2}$

$\frac{a_1}{a_n(r-1)} = \frac{10}{3}$

$3a_1 = 10a_n(r-1)$

$2^{29+1} - 1$

$\frac{10}{3}(1+2+4+8$

$a_n = \frac{3a_1}{10r-10}$

$m = \frac{5-9}{3-0}$

$= \frac{4}{3}$

$\frac{3a_1}{10r-10}(r^2-1) = 3$

$2^{n+1} - 1 = 501$

$2^{n+1} = 502$

$\frac{3a_1(r+1)}{10} = 3$

$y - 5 = \frac{4}{3}(x$

$a_1 = \frac{10}{r+1}$

$\frac{(x-h)^2}{a^2} + \frac{(y-k)^2}{b^2} = 1$

$(h+c, k), (h-c, k)$

$(3, 9)$

$(0, 5)$

2

4 $\quad \frac{16}{9} + 1$

8

16 $\quad \frac{25}{9} = \frac{5}{3}$

$\frac{24}{5}$

$(7, 5), (-1, 5)$

$9 - 5 = m(3-0)$

$\frac{4}{3} = m$

~~$y - 5 = \frac{4}{3}($~~

$2^{n+1} - 1 =$

$F_1 \quad F_2$

$(3, 9) \quad (3, 1)$

$x \quad y$

$(0, 5)$

$y - 9 = \frac{4}{3}(x-3)$

$y - 9 = \frac{4}{3}(x-1)$

$y - 9 = \frac{4}{3}x - 4$

$y - 9 = \frac{4}{3}x - 4$

$9 - 5 = m(3-0)$

$y = \frac{4}{3}x + 5$

$A = \frac{4}{3}$

$0 = \frac{4}{3}x - y + 5$

$\frac{4}{3} = m$

$B = -1$

$0 = \frac{4}{3}x - y + 5$

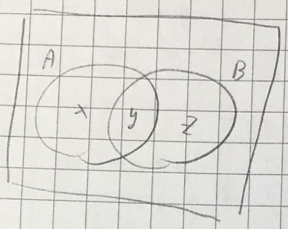
$C = 5$

$0 = \frac{4}{3}x - y + 5$

$d = \frac{|-5+5|}{\sqrt{}}$

$\frac{\left|\frac{4}{3}(3) + (-1)(1) + 5\right|}{\sqrt{\frac{4}{3}^2 + (-1)^2}} = \frac{8}{}$

$4 - 1 + 5$


A
B
x
y
z

6
16
36
46
56 13
60
~~61~~
62
~~63~~
64
~~65~~
66
~~67~~
68
~~69~~
76
86
96

คน 1 คนทำงาน 1 วัน x

y

z

8 1 24 = 24x

$6(x+y+z) = 1$

$24x = 1$

$x+y+z = 4x$

$y+z = 3x$

$x^2 \log_5 x = \frac{25}{x^3}$ $\frac{2}{3}$

$6(x+y+z) = 24x$

$x+y+z = 4x$

$y+z = 3x$

3x

$2(x+y+z)$ 3 = 14

$1 = \frac{24}{7} = 8$

$4(x+y+z) = \frac{2}{3}$ 214

2 | 4 8

2 | 2 4

1 2

4

$1 = 3$

$\frac{2}{1} = \frac{3}{1} \times \frac{2}{3}$

$8(y+z) = 1$

50 | 50 350

1 70

350

12 x 50

$\frac{2}{6}$ $\frac{1}{3}$

744

$(9 \times 7 \times a) + (7 \times 2 \times b) + c = 486$

$7(9a+2b) + c = 486$

50 | 150 250 1

3 5 3

150

400

50 | 100 250

2 5

15

24 = 3

1 = 4

300,000 = a x b

50 | 50 550

1 11

24

50 | 150 200

3 4

100

50 | 150 400

3 8

$x+y+z = 4x$

3x

50 | 50 250

1 5

$6x+6y+6z = 24x$

24x

4 12 68 630

8 56 562

741.25

2×4 1×8

22.16

B 30.5

C 27.309

9 18 14 28 24 48

×2 ×2 ×2

-4 -4 -4

0.02 dL → 110

0.04 dL 1 3 7 15 31

0 1 7 7 13

77.5

1 3 5 7 11 13 15 17 19 21 23 25 27 29 31

10 14 19 27 44

4 5 7 17

23 . $\frac{44}{1.6 \times 1.6}$

E G D

E F G A---D

A = $\frac{5}{4}$

4 : 5

2|640

2|320

2|160

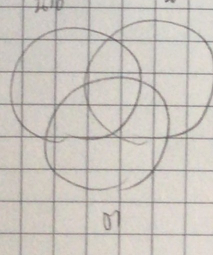
2|80

2|40

2|20

2|10

5



180 720 180

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

66

76

85