

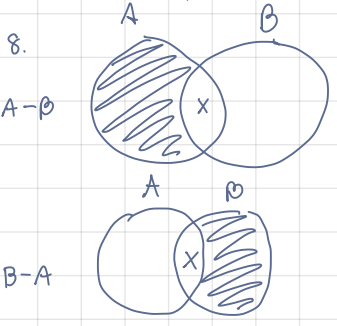
1. $2 + 2^2 + 2^3 + 2^4 + \dots + 2^n = 510$
 $2 + 4 + 8 + 16 + 32 + 64 + 128 + 256 = 510$
 $\downarrow_2 \quad \downarrow_2 \quad \downarrow_2 \quad \downarrow_2 \quad \downarrow_2 \quad \downarrow_2 \quad \downarrow_2 \quad \downarrow_2$

2. อนุกรมเรขาคณิต $\frac{a_2}{a_1} = r$

4. $\frac{4^m}{4^2 \times 10} = \frac{11}{10}$

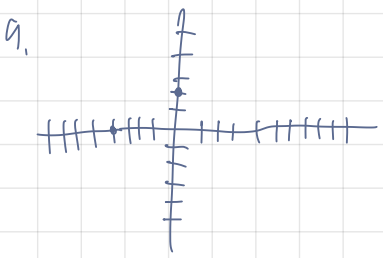
5.
 6. $(f \circ g)'(x) = 3x^2 + 1$
 $f(g(x))'(x) = 3x^2 + 1$

7. $1 - x < -\frac{3}{7} < 7 - x$
 $-\frac{3}{7} > 1 - x \quad | \quad x > \frac{10}{7}$
 $-\frac{3}{7} < 7 - x \quad | \quad x < \frac{52}{7}$
 $x > 1\frac{3}{7} \approx 1.4 \quad \therefore \text{จำนวนเต็ม } 2, 3, 4, 5, 6, 7$



$\frac{25}{100} n(A) \cap 4 B$
 $\frac{25}{100} n(A) + \frac{12.5}{100} n(B) = 36$
 $14 \quad 12$

$(A-B) \cup (B-A) =$ $= 120$
 $\frac{75}{100} n(A) + \frac{87.5}{100} n(B) = 45$



10. $8(+1)^{-1}$
 $1(-1)(+1)^{-2} \cdot +$
 $(-1)(4)^{-2} \cdot 3$
 $\frac{-3}{16} \approx -0.2$

11. $x^{\log_5 x^2} = \frac{25}{x^3}; x \in (0, \infty)$
 $x^{2 \log_5 x} = \frac{25}{x^3}$
 $x^{3+2 \log_5 x} = 25$
 $\log_5 (x^{3+2 \log_5 x}) = \log_5 25$
 $(3+2 \log_5 x)(\log_5 x) = 2$
 $3 \log_5 x + 2 \log_5 x^2 = 2$
 $3A + 2A^2 = 2$
 $\log_5 x = -2, \frac{1}{2}$
 $x = \frac{1}{25}, \sqrt{5}$
 $\frac{\sqrt{5}}{5 \times 5} =$

12. 140% ของ 800 คือ
 $100 = 800$
 $140 = \frac{800}{100} \times 140 = 8 \times 140 = 1120$
 $1120 = \frac{50}{100}$ ของราคาทั้งหมด
 ทั้งหมดราคาขาย 2240

13. $\frac{40+1}{2} = 20.5$
 $20 \rightarrow 62$
 $21 \rightarrow 60$

15. $n(S) = \binom{21}{1} \cdot \binom{20}{1} = \frac{21!}{20!} \times \frac{20!}{19!}$
 $n(E) = \binom{8}{1} \cdot \binom{7}{1} = 8 \times 7$
 $P(E) = \frac{n(E)}{n(S)} = \frac{8}{15}$

16. $n(S) = \binom{99}{1} = 99$

$n(E) = 6, 16, 26, 36, 46, 56, 66, 76, 86, 96$
 $62, 64, 68, 60$

$P(E) = \frac{n(E)}{n(S)} = \frac{14}{99}$

17. $(63 \times 7) + (74 \times 3) + 3$
 $7 + 3 + 3 = 13$

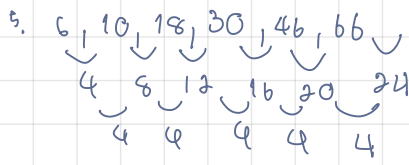
19. $1 \rightarrow \frac{5+6+7+8+9}{7} = \frac{49}{7} = 7$

20 150, 100

①

1	8	6	15
5	15	10	30
7	19	9	45

L M N O P Q R S T U V W X Y Z
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20



6. $4, 12, 28, 60$
 $\quad \quad \quad 3 \quad \quad \quad 24$
 $\quad \quad \quad \quad \quad \quad 6$

⑬. $\frac{1}{2} \times 30 \times 12 \times 2 = 360$
 $60 \times 12 = 720$
 \downarrow
 1060

7.
 10. 5, 7, 4, 8 3

⑳. C F O B G E A
 \downarrow
 22. 11

23. $0.975 \times 350 = 341.25$

$\frac{100}{341.25} \times 4 = 1.17 \%$

24. A BMT = 22.16 Unit
 B BMT = 30.5 Unit
 C BMT = 27.3 Unit

25. UH 1.375 BMT 22.65 ②
 2V 1.2 BMT 21.61 ①
 2 1.55 BMT 24.96 ③

26. $\frac{5 \text{ mol}}{1000 \text{ mL}}$

27. $22 \times 50 = 110$
 $3.1 \times 25 = 77.5$

28. $25 = \frac{x}{(1.6)^2}$
 $x = 25 \times (1.6)^2$
 $= 64$
 44 (17) 14-8 = 56

29. 1 km 96 7 miles
 10 km 96 140 miles
 1 mile 1.6 km 20 miles
 7 miles 1.6 km 140 miles

30. 66 km / hr.
 76 km / hr.
 52 km / hr.
 45 km / hr.