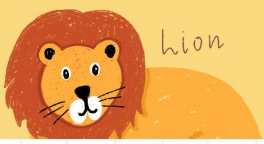
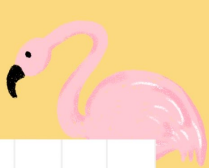




3. $\frac{x-3}{3} - \frac{5}{x-2} = \frac{2}{3} \quad \cdot 3$

$x-3 - \frac{15}{x-2} = 2$

$x-3 = \frac{2 \cdot (x-2) + 15}{x-2}$ (1. $\cdot (x-2)$)

$x-3 = \frac{2x-4+15}{x-2}$

$(x-3)(x-2) = 2x+11$

$x^2 - 5x + 6 = 2x + 11$

$x^2 - 7x - 5 = 0$

$A > B$

$24x^2 + 74x + 55 = 0$

$b^2 - 4ac = 196$

$x = \frac{-74 \pm 14}{48}$

$x = \frac{-74+14}{48}$ $\quad x = \frac{-74-14}{48}$

$x = \frac{-60}{48} \; (-5 / 4)$ $\quad x = \frac{-88}{48} \; (-22 / 12)$ $= \frac{11}{6}$

$x = -\frac{5}{4}$ (B) $\quad x = \frac{11}{6}$ (A)

$\frac{11}{6} \cdot 2 - \frac{5}{4} \cdot 3 : \frac{22-(-15)}{12} = \frac{37}{12} : 3\frac{1}{12}$

$\frac{x-3}{3} \times \frac{5}{x-2} = \frac{2}{3}$

$x^2 - 5x + 6 - 15 = \frac{2}{3}$

$x^2 - 5x + 6 = \frac{2}{3} + 15 \quad (\cdot 3 / 1 \cdot 3)$

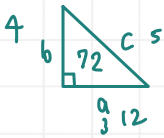
$x^2 - 5x + 6 = \frac{47}{3}$

$3x^2 - 15x + 18 = 47$

$3x^2 - 15x - 29 =$

$b^2 - 4ac = 225 - 4(29 \times 3)$

$= 225 + 348$



C : a

5 : 3

20

$72 = \frac{1}{2} \times 12 \times 12$

3.

$12 = \frac{1}{2} 3x \cdot 4x$

$72 = 6x$

$12 = x$

$72 = 6x^2$

$12 = x^2$

$\sqrt{12} = x$

$3\sqrt{12} = 4\sqrt{72}$

$6\sqrt{3} \quad 5\sqrt{12}$

$8\sqrt{3} \quad 10\sqrt{3}$

5

$\frac{x^2(x^2)}{x+1(x^2)} + \frac{(x+1)}{x^2(x+1)} = 3$

$y : \frac{1}{x} + \frac{1}{x^2}$

$\frac{x^4+2x^2+2x+2x+2}{x^3+x^2} = 3$

$\frac{x^4+2x^2+4x+2}{x^3+x^2} = 3$

$x^4+2x^2+4x+2 = 3x^3+3x^2$

$x^4+2x^2 = 3x^3+3x^2-4x-2$

$x^2(x^2+2) = 3x^2(x+1)-2(x+1)$

$x^2(x^2+2) = 3x^2-2(x+1)$

$\frac{x^2(x^2+2)}{x+1} = 3x^2-2$

$x^2+bx+c = (x+\sqrt{3})(x+\sqrt{2})$ $b+c=?$

$x^2+bx+c = x^2+x\sqrt{3}+x\sqrt{2}+\sqrt{6}$

$x^2+bx+c:$

$bx = x\sqrt{3}+x\sqrt{2}$ $\sqrt{6}$

$\sqrt{3}+\sqrt{2}+\sqrt{6}$

$(ax^2-kx)^2=(1)^2$

$a^2x^4-k^2x^2=1$

$(ax^2)^2-(kx)^2=1$

$(ax^2-kx)(ax^2+kx)=1$

$x(ax-k)x(ax+k)=1$

$x^2(ax-k)(ax+k)=1$

$x^2(ax)^2-(k)^2 = 1$

$x\,(ax-k) = 1$

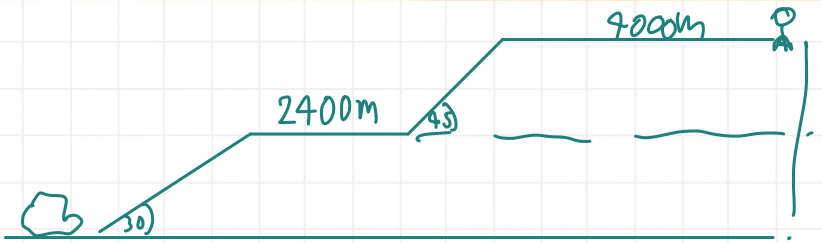
$\downarrow$ $ax-k=1$

0 $ax=k+1$

$x=\frac{k+1}{a}$

$\sqrt{\frac{k+1}{a}} \neq -\sqrt{\left(\frac{k+1}{a}\right)^{-1}}$

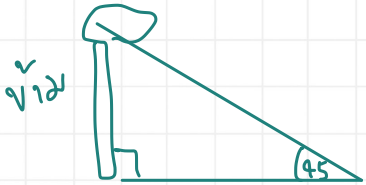
$-\frac{(k+1)}{a}$



$$\frac{\frac{\sqrt{2}}{2}\cdot\frac{\sqrt{3}}{2}+\sqrt{3}\cdot\frac{2}{\sqrt{2}}}{\sqrt{3}\cdot\frac{2}{\sqrt{2}}\quad\sqrt{3}\cdot\frac{2}{\sqrt{2}}}$$

$$\frac{\frac{\sqrt{6}}{4}+\frac{2\sqrt{3}}{\sqrt{2}}}{\frac{2\sqrt{3}}{\sqrt{2}}}$$

$$\frac{\sqrt{6}}{4}+\frac{2\sqrt{3}}{\sqrt{2}}\times\frac{\sqrt{2}}{2\sqrt{3}}$$



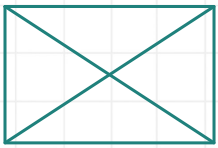
$\tan 45^\circ = \frac{x}{25}$

$1 = \frac{x}{25}$

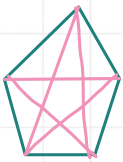
$x = 25$

$\sin A + \cos A = \sqrt{2}$

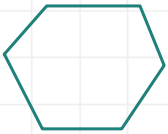
$\frac{3\sin^2 A - 2\cos^2 A}{\tan^2 A}$



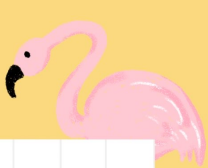
4 เหลี่ยม
2 เส้น
$n-2$



5 เหลี่ยม
5 เส้น



$\frac{5}{2} \times (5-3)$



$3 \leq x \leq 10$

$50 - x \cdot x > A$

$47 \cdot 3 > 141$

> 186

> 400

$141 - 400$

$$1 + x\frac{x}{1+x}$$

$$1 + x + x^2 + x$$

$$x^2 + 2x + 1$$

$$x + \frac{x}{x^2 + 2x + 1}$$

$$x^3 + 2x^2 + x + x$$

$$x^3 + 2x^2 + 2x + 1$$

$$\frac{x}{x^3 + 2x^2 + 2x + 1}$$

$$\frac{2x^3+3x^2-27x}{x-3} \times \frac{x^2-25}{2x^2-x-45}$$

$$\frac{x(2x^2+3x-27)}{x-3}$$

$$\frac{x(2x+9)(x-3)}{(x-3)} \times \frac{(x-5)(x+5)}{(2x+9)(x-5)}$$

$$x^2+5x$$

$$2a^{2n}-a^n b^n-6b^{2n}$$

$$(2a^n+3b^n)(a^n-2b^n)$$

3

4

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

$$9152 = \frac{1}{3} \times \pi (24-8)^2 \times h$$

$$9152 = \frac{1}{3} \times \frac{22}{7} \times 256 \times h$$

$$192192 = 256 \times 22h$$

$$= 34.125 \text{ cm}$$

○ ใหญ่ = $\pi \cdot 2r^2$

○ เล็ก = πr^2

$2\pi r^2 - \pi r^2$

πr^2 //

$\frac{120r}{100}$ $\frac{12r}{10}$

$2\left(\frac{12r}{10}\right)$

$\pi \cdot \left(\frac{24r}{10}\right)^2 - \pi \cdot \left(\frac{12r}{10}\right)$

$\pi \cdot \left(\frac{24r - 12r}{10}\right)\left(\frac{24r+12r}{10}\right)$ $\frac{24r}{10}$

$\pi \left(\frac{12r}{10}\right)\left(\frac{36r}{10}\right)$

$\pi \cdot \frac{36r^2}{10}$

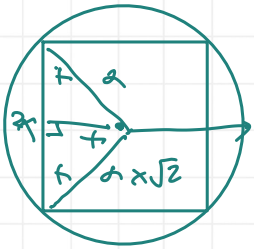
$3.6\pi r^2$

$\pi r^2 = 100$

$3.6\pi r^2 = \frac{100 \times 3.6\pi r^2}{\pi r^2}$

R รอบวง = $2\pi r$

$\frac{2\pi r}{2\pi}$



$4\pi r^2 = 4 \cdot \frac{22}{7} (x\sqrt{2})^2$

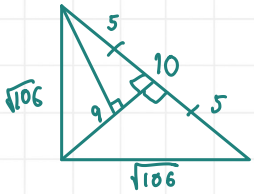
$= 4 \cdot \frac{22}{7} \cdot x^2 \cdot 2$

$= 25.14x^2$

$6 \cdot (2x)^2 = 24x^2$

$25.14 : 24$

$1.05 : 1$

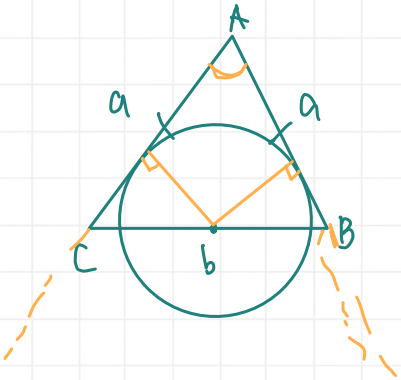


$2\sqrt{106} + 10$

$c^2 = 5^2 + 9^2$

$= 25 + 81$

$= \sqrt{106}$



$a + a - b$

$\frac{AB + AC - BC}{2} = h$

$\frac{2a - b}{2} = h$

$x = a, c$

$\sqrt{(x-a)^2 + b^2} + \sqrt{(x-c)^2 + d^2}$

$= x - a + b + x - c + d$

$= 2x - a + b - c + d$

$ax^2 + bx + c$

b: $e, 8$; c: $8, 9$

$x = 2, x = 8$; $x = 8, x = 9$

$(x-2)(x-8)$; $(x-8)(x-9)$

$x^2 - 10x + 16$; $x^2 - 17x + 72$

$x^2 - 17x + 16$

$(x-16)(x-1)$

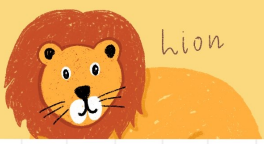
$x = 1, 16$

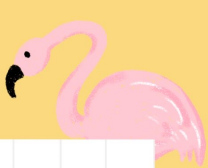
$2x$ 1hr $v = \frac{s}{t} = \frac{2x}{1} = 2x$ km/hr

$2x$ 2hr $v = \frac{s}{t} = \frac{2x}{2} = x$ km/hr

$\frac{x}{x} : \frac{2x}{x}$

$1 : 2$





$\sqrt[3]{\frac{1}{3}}$, $\sqrt{\frac{7}{2}}$ $\sqrt[3]{\left(\frac{2}{3}\right)^2}$

0.33

0.67 0.707 0.76