

$$S_n = \frac{a_1(1-r^n)}{1-r}$$

$$510 = \frac{2(1-2^n)}{1-2}$$

$$-\frac{510}{2} = 1-2^n$$

$$-255 = 1-2^n$$

$$2^n = 256$$

$$n = 8$$

$$\frac{a_1(1-r^{20})}{1-r} = 13$$

$$a_1(1-r^{20}) = 13 - 13r \quad \text{--- (1)}$$

$$\frac{a_1(1-r^{20})}{1+r} = 17$$

$$a_1(1-r^{20}) = 17 + 17r \quad \text{--- (2)}$$

$$\textcircled{1} = \textcircled{2}$$

$$17 + 17r = 13 - 13r$$

$$30r = -4$$

$$r = -\frac{2}{15}$$

$$\frac{(x-3)^2}{9} + \frac{(y-5)^2}{25} = 1$$

$$\frac{9-5}{3-0} = \frac{4}{3}$$

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

$$3y - 15 = 4x$$

$$4x - 3y + 15 = 0$$

$$d = \frac{|4(3) - 3(15) + 15|}{\sqrt{4^2 + (-3)^2}}$$

$$= \frac{24}{5}$$

$$= 4.8$$

$$1210 = 11 \times 11 \times 10$$

$$11^{10^9} = 10(q) + 1$$

$$11^{111} = 1210(q) + 121$$

Ans 121

$$1-x < -\frac{3}{9} < 7-x$$

$$1 < x - \frac{3}{4} < 7$$

$$1\frac{3}{9} < x < 7\frac{3}{9} \Rightarrow 6$$

$$f(x) = k(x+4)(x-2)$$

$$f(0) = k(4)(-2)$$

$$16 = -8k$$

$$k = -2$$

$$f(x) = -2(x^2 + 2x - 8)$$

$$= -2x^2 - 4x + 16$$

$$a = -2$$

$$b = -4$$

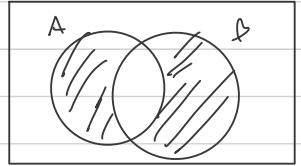
$$c = 16$$

$$\frac{4ac - b^2}{4a} = \frac{16 - (-4)^2}{-8}$$

$$= 18$$

$$n(A \cap B) = x; \quad 25\% \Rightarrow n(A) = 4x$$

$$12.5\% \Rightarrow n(B) = 8x$$



$$(A - B) \cup (B - A) = (4x - x) + (8x - x) = 120$$

$$3x + 7x = 120$$

$$x = 12$$

$$\therefore n(A \cup B) = 120 + 12$$

$$= 132$$

$$\lim_{h \rightarrow 0} \frac{N(t+h) - N(t)}{h}$$

$$\frac{\frac{6}{(t+h)+1} - \frac{8}{t+1}}{h}$$

$$\frac{8}{h} \left( \frac{1}{t+h+1} - \frac{1}{t+1} \right)$$

$$\frac{8}{h} \left( \frac{(t+1) - (t+h+1)}{(t+h+1)(t+1)} \right)$$

$$\frac{8}{h} \cdot \left( \frac{-h}{(f+h+1)(f+1)} \right)$$

$$\frac{-8}{(f+1)^2}$$

$$(2 \log_5 x) \log_5 x = 2 - 3 \log_5 x$$

$$2a^2 = 2 - 3a$$

$$2a^2 + 3a - 2 = 0$$

$$(2a - 1)(a + 2) = 0$$

$$a = \frac{1}{2}, -2$$

$$\log_5 \frac{2}{5} x = \frac{1}{2} - 2$$

$$x = 5^{\frac{1}{2}}, 5^{-2}$$

$$x = \sqrt{5}, \frac{1}{25}$$

$$\text{విలు} \frac{800 \times 140}{100} = 1120$$

$$\text{అదీ 50\% : } \frac{1120 \times 100}{50} \\ = 2240$$

$$\frac{N+1}{2} = \frac{40+1}{2} = 20.5$$

$$\frac{b^2 - a^2}{2} = 69$$

---

$$21 \times 20 = 420$$

$$8 \times 9 = 56$$

$$\frac{56}{420} = \frac{2}{15}$$

1      8      6

5      15      10

7      ?      9

—   F   —   —

4      8      12      16      20

2      4      8      16      32

5      7      4      8      3

$\underbrace{\hspace{1em}}$      $\underbrace{\hspace{1em}}$      $\underbrace{\hspace{1em}}$      $\underbrace{\hspace{1em}}$      $\underbrace{\hspace{1em}}$

    +2      -3      +4      -5      +6

ନିମ୍ନ	ଉପର	ଫଳ	ଫଳ
୫	୭	୭	୫
୬	୮	୮	୬
୭		୯	

$$\bar{x} = \frac{2+2+3+3+4}{5} = 2.8$$

$$\bar{y} = \frac{5+6+7+7+7+8}{6} = 7$$

$$6, 16, 26, 36, 46, 56, 66, 76, 86, 96$$

$$60, 62, 64, 68$$

$$10 + 4 = 14$$

$$\frac{14}{29}$$

$$6 \rightarrow 1$$

$$1 \rightarrow \frac{1}{6}$$

$$24 \rightarrow 1$$

$$1 \rightarrow \frac{1}{24}$$

$$1 \rightarrow \frac{1}{6} - \frac{1}{24} = \frac{1}{8}$$

$$4 \rightarrow 4 \times \frac{1}{6} = \frac{2}{3}$$

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

$$\frac{1}{8} \Rightarrow 2 \text{ 216}$$

$$\frac{1}{3} \Rightarrow 1 \times \frac{1}{3} \times 5$$

$$2 \text{ 3 216}$$



$$50 = 2 \times 5^1$$

$$500 = 2^3 \times 5^2$$