SECTION A

^^Which quadrant does θ terminates sin θ is positive and tan θ is positive

@@1st quadrant ~

@@2nd quadrant

@@ 3rd quadrant

@@ 4th quadrant

^^Which quadrant does θ terminates sin θ is positive and tan θ is negative

@@1st quadrant

@@2nd quadrant~

@@ 3rd quadrant

@@ 4th quadrant

^^Which quadrant does θ terminates sin θ is negative and tan θ is positive

@@1st quadrant

@@2nd quadrant

@@ 3rd quadrant~

@@ 4th quadrant

^^Which quadrant does θ terminates sin θ is negative and tan θ is negative

@@1st quadrant

@@2nd quadrant

@@ 3rd quadrant

@@ 4th quadrant~

^^Which quadrant does θ terminates sin θ is positive and cot θ is positive

@@1st quadrant~

@@2nd quadrant

@@ 3rd quadrant

@@ 4th quadrant

^^Which quadrant does θ terminates sin θ is positive and cot θ is negative

@@1st quadrant

@@2^{nd} quadrant~

@@ 3^{rd} quadrant

@@ 4^{th} quadrant

^^Which quadrant does θ terminates sin θ is negative and cot θ is positive

@@1^{st} quadrant

@@2^{nd} quadrant

@@ 3^{rd} quadrant~

@@ 4^{th} quadrant

^^Which quadrant does θ terminates sin θ is negative and cot θ is negative

@@1^{st} quadrant

@@2^{nd} quadrant

@@ 3^{rd} quadrant

@@ 4^{th} quadrant~

^^Which quadrant does θ terminates sin θ is positive and cos θ is positive

@@1^{st} quadrant~

@@2^{nd} quadrant

@@ 3^{rd} quadrant

@@ 4^{th} quadrant

^^Which quadrant does θ terminates sin θ is positive and cos θ is negative

@@1^{st} quadrant

@@2^{nd} quadrant~

@@ 3^{rd} quadrant

@@ 4^{th} quadrant

^^Which quadrant does θ terminates sin θ is negative and cos θ is positive

@@1^{st} quadrant

@@2^{nd} quadrant

@@ 3^{rd} quadrant

@@ 4^{th} quadrant~

^^Which quadrant does θ terminates sin θ is negative and cos θ is negative

@@1st quadrant

@@2nd quadrant

@@ 3rd quadrant~

@@ 4th quadrant

^^Which quadrant does θ terminates sin θ is positive and sec θ is positive

@@1st quadrant~

@@2nd quadrant

@@ 3rd quadrant

@@ 4th quadrant

^^Which quadrant does θ terminates sin θ is positive and sec θ is negative

@@1st quadrant

@@2nd quadrant~

@@ 3rd quadrant

@@ 4th quadrant

^^Which quadrant does θ terminates sin θ is negative and sec θ is positive

@@1st quadrant

@@2nd quadrant

@@ 3rd quadrant

@@ 4th quadrant~

^^Which quadrant does θ terminates sin θ is negative and sec θ is negative

@@1st quadrant

@@2nd quadrant

@@ 3rd quadrant~

@@ 4th quadrant

SECTION B

^^ Given that $\sin\theta = \frac{1}{2}$ $0^o \le \theta \le 90^o$ find $\cos\theta$

@@ $\frac{\sqrt{3}}{2}$ ~

@@ 2

@@ $\frac{2}{\sqrt{3}}$

@@ $\frac{1}{\sqrt{3}}$

^^ Given that $\sin\theta = \frac{1}{2}$ $0^o \le \theta \le 90^o$ find $\tan\theta$

@@ $\frac{\sqrt{3}}{2}$

@@ $\frac{1}{\sqrt{3}}$ ~

@@ $\frac{2}{\sqrt{3}}$

@@ $\frac{-1}{\sqrt{3}}$

^^ Given that $\sin\theta = \frac{1}{2}$ $0^o \le \theta \le 90^o$ find $\sec\theta$

@@ $\frac{\sqrt{3}}{2}$

@@ $\frac{2}{\sqrt{3}}$ ~

@@ 2

@@ $\frac{-2}{\sqrt{3}}$

^^ Given that $\sin\theta = \frac{1}{2}$ $0^o \le \theta \le 90^o$ find $\cos ec\theta$

@@ $\frac{\sqrt{3}}{2}$

@@ 2 ~

@@ $\frac{2}{\sqrt{3}}$

@@ $\frac{1}{\sqrt{3}}$

^^ Given that $\sin\theta = \frac{1}{2}$ $0^o \le \theta \le 90^o$ find $\cot\theta$

@@ $\sqrt{3}$ ~

@@ $\frac{1}{4}$

@@ $-\frac{2}{\sqrt{3}}$

@@ $-\sqrt{3}$

^^ Given that $\sin\theta = \frac{1}{2}$ $90^o \le \theta \le 180$ find $\cos\theta$

@@ $\frac{\sqrt{3}}{2}$

@@ $-\frac{\sqrt{3}}{2}$ ~

@@ $\frac{1}{\sqrt{3}}$

@@ $\frac{-1}{\sqrt{3}}$

^^Given that $\sin\theta = \frac{1}{2}$ $90^o \le \theta \le 180$ find $\tan\theta$

@@ $\frac{\sqrt{3}}{2}$

@@ $\frac{2}{\sqrt{3}}$

@@ $\frac{1}{\sqrt{3}}$

@@ $\frac{-1}{\sqrt{3}}$ ~

^^Given that $\sin\theta = \frac{1}{2}$ $90^o \le \theta \le 180$ find $\sec\theta$

@@ $\frac{\sqrt{3}}{2}$

@@ $\frac{2}{\sqrt{3}}$

@@ 2

@@ $\frac{-2}{\sqrt{3}}$ ~

^^Given that $\sin\theta = \frac{1}{2}$ $90^o \le \theta \le 180$ find $\cos ec\theta$

@@ $\frac{1}{3}$

@@ $\frac{2}{\sqrt{3}}$

@@ 2 ~

@@ $\frac{1}{\sqrt{3}}$

^^Given that $\sin\theta = \frac{1}{2}$ $90^o \le \theta \le 180$ find $\cot\theta$

@@ $-\sqrt{3}$ ~

@@ $\sqrt{3}$

@@ $-\frac{2}{\sqrt{3}}$

@@ $\frac{1}{3}$

^^Given that $\sin\theta = -\frac{1}{2}$ $180^o \angle \theta \le 270^o$ find $\cos\theta$

@@ $\frac{\sqrt{3}}{2}$

@@ $-\frac{\sqrt{3}}{2}$ ~

@@ $\frac{1}{3}$

@@ $\frac{1}{2}$

^^Given that $\sin\theta = -\frac{1}{2}$ $180^o \angle \theta \leq 270^o$ find $\tan\theta$

@@ 2

@@ $\sqrt{3}$

@@ $\frac{1}{\sqrt{3}}$ ~

@@ $\frac{-1}{\sqrt{3}}$

^^Given that $\sin\theta = -\frac{1}{2}$ $180^o \angle \theta \leq 270^o$ find $\sec\theta$

@@ $\frac{\sqrt{3}}{2}$

@@ $-\frac{\sqrt{3}}{2}$ ~

@@ $\frac{2}{\sqrt{3}}$

@@ $\frac{1}{2}$

^^Given that $\sin\theta = -\frac{1}{2}$ $180^o \angle \theta \leq 270^o$ find $\cos ec\theta$

@@ $\frac{\sqrt{3}}{2}$

@@ $-\sqrt{3}$

@@ $\frac{2}{\sqrt{3}}$

@@ -2 ~

^^Given that $\sin\theta = -\frac{1}{2}$ and θ in the 4th quadrant find $\cos\theta$

@@ $\frac{\sqrt{3}}{2}$ ~

@@ $-\frac{\sqrt{3}}{2}$

@@ $\frac{2}{\sqrt{3}}$

@@ $\frac{-1}{\sqrt{3}}$

^^Given that $\sin\theta = -\frac{1}{2}$ and θ in the 4th quadrant find $\tan\theta$

@@ $\frac{\sqrt{3}}{2}$

@@ $-\frac{2}{\sqrt{3}}$

@@ $\frac{2}{\sqrt{3}}$

@@ $\frac{-1}{\sqrt{3}}$ ~

^^Given that $\sin\theta = -\frac{1}{2}$ and θ in the 4th quadrant find $\sec\theta$

@@ $\sqrt{3}$

@@ $-\sqrt{3}$

@@ $\frac{2}{\sqrt{3}}$ ~

@@ $\frac{-1}{\sqrt{3}}$

^^Given that $\sin\theta = -\frac{1}{2}$ and θ in the 4th quadrant find $\operatorname{cos}ec\theta$

@@ -2 ~

@@ $-\frac{\sqrt{3}}{2}$

@@ $\frac{1}{\sqrt{3}}$

@@ $\frac{-1}{\sqrt{3}}$

^^Given that $\sin\theta = -\frac{1}{2}$ and θ in the 4th quadrant find $\cot\theta$

@@ $-\sqrt{3}$ ~

@@ $\frac{1}{2}$

@@ -2

@@ $\frac{1}{\sqrt{3}}$

SECTION C

^^ Sin 55^0 is less than cos 55^0

@@True

@@False~

^^ Sin (90+θ) = cos θ

@@True

@@False~

^^ Cosine and Sine have the same signs in the 1^{st} and 2^{nd} quadrants

@@True

@@False~

^^ Cosine and Sine have opposite signs in the 2^{nd} and 4^{th} quadrants

@@True~

@@False

^^ Sine and Tangent have the same sign in the 1^{st} quadrant only

@@True

@@False~

^^ Sine and Tangent have the same sign in the 3^{rd} quadrant only

@@True

@@False~

^^ Cosine and Tangent have opposite signs in the 2^{nd} and 3rd quadrants

@@True

@@False~

^^ Cosine and Tangent have opposite signs in the 3^{rd} and 4^{th} quadrants

@@True~

@@False

^^Sine and Cosine have the same sign in the 3^{rd} quadrant only

@@True

@@False~

^^Sine and Tangent have the same sign in the 1^{st} and 4^{th} quadrants

@@True~

@@False

^^Sine and Tangent have the same sign in the 1^{st} and 3^{rd} quadrant

@@True

@@False~

^^Sine and Tangent have the same sign in the 1^{st} and 2^{nd} quadrant

@@True

@@False~

^^Sine and Tangent have the same sign in the 2^{nd} and 3^{rd} quadrant

@@True ~

@@False

^^Sine and Tangent have the same sign in the 3^{rd} and 4^{th} quadrant

@@True

@@False~

^^Cos 55 is less than sin 55

@@True~

@@False

^^Cos $(90+\theta) = \sin \theta$

@@True

@@False~

^^Cosine and sine have the same signs in the 1^{st} and 3rd quadrant

@@True~

@@False

^^Cosine and sine have the same signs in the 2^{nd} and 4^{th} quadrant

@@True

@@False~

^^Cosine and sine have the same signs in the 1^{st} quadrant only

@@True

@@False~

^^Sine and Tangent have opposite signs in the 2^{nd} and 3^{rd} quadrant

@@True~

@@False

^^Sine and Tangent have opposite signs in the 2^{nd} and 4^{th} quadrant

@@True

@@False~

^^Cosine and Tangent have opposite signs in the 2^{nd} and 3^{rd} quadrants

@@True

@@False~

SECTION D

^^ $\frac{\sin 3A}{\sin A} - \frac{\cos 3A}{\cos A}$ Simplifies to

@@ 2~

@@4

@@ 4/3

@@2/3

^^ $\frac{\sin 5B - \sin 3B}{\cos 5B + \cos 3B}$ Simplifies to

@@ tan2B~

@@cos4B

@@ cos3B

@@sin5B

^^ $\cot\theta + \frac{\sin\theta}{1+\cos\theta}$ Simplifies to

@@ cotθ

@@cosecθ ~

@@ secθ

@@sinθ

^^ $\frac{\cos(\alpha+\beta)}{\sin\alpha\cos\beta} + \tan\beta$

@@ cot α ~

@@tan α

@@ sin α

@@cos β

^^ $\frac{1+\tan\theta}{1+\cot\theta}$ Simplifies to

@@ cotθ secθ

@@2cosecθ

@@ secθ

@@tanθ ~

^^ $\frac{\sin 4\theta + \sin 2\theta}{\cos 4\theta + \cos 2\theta}$ Simplifies to

@@ tan3θ ~

@@cosec4θ

@@ cos5θ

@@sin2θ

^^ $\frac{\sin 75 + \sin 15}{\cos 75 + \cos 15}$ Simplifies to

@@ 3

@@3/4

@@√3 ~

@@2/3

^^2sin45^{o}cos15^{o} Simplifies to

@@√3 tan35

@@4cosec45

@@ √2cos15 ~

@@7sin20

^^sin40^o +sin20^o Simplifies to

@@√3 tan45

@@4cosec10

@@ cos10 ~

@@sin20

^^Sin60^o +sin40^o Simplifies to

@@ tan45cos30

@@4cosec10

@@ 2sin50cos10 ~

@@4sec10sin20

^^Sin55^o –sin15^o Simplifies to

@@ tan15cos35

@@2cos35sin20 ~

@@ 7sin60cos50

@@4sin20

^^Cos65^o +cos15^o Simplifies to

@@ sin15cos35

@@2cos40cos25 ~

@@ sin40cos25

@@4sin15

^^ $\cos^2\theta\tan\theta\cos ec\theta$ Simplifies to

@@sinθ

@@cosθ ~

@@tanθ

@@2cosθ

^^ $(1+\tan\theta)^2 + (1-\tan\theta)^2$ Simplifies to

@@2sec^{2}θ ~

@@cosθ

@@2sinθ

@@4tanθ

^^ ($a\cos x + b\sin x$)^2+($a\sin x - b\cos x$)^2 Simplifies to

@@ $a^2 + b^2$ ~

@@ $a^2 - b^2$

@@ $2a^2 + b^2$

@@ $a^2 + 2b^2$

^^ $\frac{\tan y - \sin y}{\sin^2 y}$ Simplifies to

@@ $\frac{\sec y}{1 + \cos y}$ ~

@@$tany$

@@cosec^{2}y

@@siny+1

^^ $\sin^2\theta\cot^2\theta\cos ec^2\theta\tan^2\theta$ Simplifies to

@@1 ~

@@2/3

@@1/2

@@3/4

^^Sin30º + sin20º Simplifies to

@@ Tan45cos35

@@4cosec10sin35

@@ 2sin25cos5 ~

@@4cos10sin25

^^Sin70º - sin40º Simplifies to

@@cos45sin35

@@2cos55sin15 ~

@@ 2sin35cos15

@@4cos10sin25

^^Cos50º+cos20º Simplifies to

@@ 2sin35cos15

@@2cos35cos15~

@@ 2sin25cos5

@@4cos10cos25

^^Sin20^{0}cos15^0 Simplifies to

@@1/2(sin35+sin5) ~

@@ 1/2(cos35+cos5)

@@ 1/2(sin35-sin5)

@@ 1/2(cos35-cos5)

^^Cos40ºcos10º Simplifies to

@@1/2(cos50+cos30) ~

@@ 1/2(cos50-cos30)

@@1/2(sin50-cos30)

@@1/2(sin50+sin30)

^^Sin3θsin2θ Simplifies to

@@-1/2(cos5θ-cosθ) ~

@@ 1/2(cos5θ+cosθ)

@@1/2(sin5θ+sinθ)

@@-1/2(sin5θ-sinθ)

^^Cos (arc sin $-\frac{\sqrt{2}}{2}$)

@@ $\frac{\sqrt{3}}{2}$

@@ $-\sqrt{3}$

@@ $\frac{\sqrt{2}}{2}$ ~

@@ -2

^^Arc sin (tan $\frac{3\Pi}{4}$)

@@ $\frac{\Pi}{4}$

@@ $\frac{3\Pi}{2}$

@@ $\frac{\Pi}{2}$

@@ $-\frac{\Pi}{2}$ ~

^^Sin (arc sin $\frac{1}{2}$)

@@ $\frac{1}{4}$

@@ $\frac{3}{2}$

@@ $\frac{1}{2}$ ~

@@ $-\frac{1}{2}$

^^Cos (arc cos $\left(\frac{3}{5}\right)$)

@@ $\frac{4}{5}$ ~

@@ $\frac{3}{4}$

@@ $\frac{1}{2}$

@@ $-\frac{5}{2}$

^^Sin(arc cos $\left(-\frac{2}{3}\right)$)

@@ $\frac{\sqrt{5}}{3}$ ~

@@ $\frac{\sqrt{5}}{2}$

@@ $\frac{1}{2}$

@@ $-\frac{\sqrt{3}}{2}$

^^Tan(arc sin $\left(-\frac{3}{4}\right)$)

@@ $\frac{3\sqrt{5}}{3}$

@@ $\frac{\sqrt{5}}{2}$

@@ $\frac{3}{7}$

@@ $-\frac{3\sqrt{7}}{7}$ ~

^^Which of the following is the value of cos 870°

@@ - $\frac{\sqrt{3}}{2}$ ~

@@ $-\sqrt{3}$

@@ $\frac{2}{\sqrt{3}}$

@@ -2

^^Which of the following is the value of sin 870°

@@ $\frac{1}{2}$ ~

@@ $-\sqrt{2}$

@@ $-\frac{1}{\sqrt{3}}$

@@-3

^^Which of the following is the value of tan 870°

@@ $\frac{\sqrt{3}}{2}$

@@ $-\sqrt{2}$

@@ $-\frac{1}{\sqrt{3}}$ ~

@@ $\frac{1}{2}$

^^Which of the following is the value of sec 870°

@@ $-\frac{2}{\sqrt{3}}$ ~

@@ $-\sqrt{5}$

@@ $\frac{2}{3}$

@@ 2

^^Which of the following is the value of cosec 870°

@@ $\frac{\sqrt{3}}{4}$

@@ $-\sqrt{3}$

@@ $\frac{2}{\sqrt{3}}$

@@ 2 ~

^^Which of the following is the value of cot 870°

@@ $\frac{\sqrt{3}}{2}$

@@ $-\sqrt{3}$ ~

@@ $\frac{2}{\sqrt{3}}$

@@ 3

^^The reference angle of 3490º is

@@150^0

@@100^0

@@200^0

@@250^0 ~

^^The reference angle of 870º is

@@55^0

@@75^0

@@125^0

@@150^0 ~

^^The reference angle of 1380º is

@@300~

@@245

@@215

@@315

^^The reference angle of 1860º is

@@60~

@@45

@@65

@@50

SECTION E

^^Given that sin A= $\frac{5}{13}$ tan B= $-\frac{3}{4}$ as A and B are in the 2nd quadrant. find $\sin(A+B)$

@@16/65

@@56/65

@@-56/65 ~

@@-16/65

^^Given that sin A= $\frac{5}{13}$ tan B= $-\frac{3}{4}$ as A and B are in the 2nd quadrant find $\sin(A-B)$

@@16/65 ~

@@56/65

@@-56/65

@@-16/65

^^Given that sin A= $\frac{5}{13}$ tan B= $-\frac{3}{4}$ as A and B are in the 2nd quadrant find $\cos(A+B)$

@@33/65 ~

@@63/65

@@16/63

@@16/65

^^Given that sin A= $\frac{5}{13}$ tan B= $-\frac{3}{4}$ as A and B are in the 2nd quadrant find $\cos(A-B)$

@@63/65 ~

@@33/65

@@16/63

@@16/56

^^Given that sin A= $\frac{5}{13}$ tan B= $-\frac{3}{4}$ as A and B are in the 2nd quadrant find $\tan(A+B)$

@@-56/33~

@@56/33

@@63/65

@@33/56

^^Given that sin A= $\frac{5}{13}$ tan B= $-\frac{3}{4}$ as A and B are in the 2nd quadrant find $\tan(A-B)$

@@-56/33

@@16/63~

@@-16/63

@@56/33

^^Given that sin A= $\frac{5}{13}$ and tan B= $\frac{3}{4}$ where $90^o \angle A \le 180^o and 180^o \angle B \le 270^o$ find $\sin(A+B)$

@@16/65~

@@56/65

@@-56/65

@@-16/65

^^Given that sin A= $\frac{5}{13}$ and tan B= $\frac{3}{4}$ where $90^o \angle A \le 180^o and 180^o \angle B \le 270^o$ find $\sin(A-B)$

@@16/65

@@56/65

@@-56/65~

@@-16/65

^^Given that sin A= $\frac{5}{13}$ and tan B= $\frac{3}{4}$ where $90^o \angle A \le 180^o and 180^o \angle B \le 270^o$ find $\cos(A+B)$

@@63/65~

@@33/65

@@16/63

@@16/65

^^Given that sin A= $\frac{5}{13}$ and tan B= $\frac{3}{4}$ where $90^o \angle A \le 180^o and 180^o \angle B \le 270^o$ find $\cos(A-B)$

@@63/65

@@33/65~

@@16/63

@@16/65

^^Given that sin A= $\frac{5}{13}$ and tan B= $\frac{3}{4}$ where $90^o \angle A \leq 180^o and 180^o \angle B \leq 270^o$ find $\tan(A+B)$

@@63/65

@@33/65

@@16/63 ~

@@-56/65

^^Given that sin A= $\frac{5}{13}$ and tan B= $\frac{3}{4}$ where $90^o \angle A \leq 180^o and 180^o \angle B \leq 270^o$ find $\tan(A-B)$

@@-56/33 ~

@@16/63

@@-16/63

@@56/33

^^Given that sin A=- $\frac{5}{13}$ tan B= $\frac{3}{4}$ as A and B are in the 3rd quadrant find $\sin(A+B)$

@@16/65

@@56/65~

@@-56/65

@@-16/65

^^Given that sin A=- $\frac{5}{13}$ tan B= $\frac{3}{4}$ as A and B are in the 3rd quadrant find $\sin(A-B)$

@@16/65

@@56/65

@@-56/65

@@-16/65~

^^Given that sin A=-$\frac{5}{13}$ tan B= $\frac{3}{4}$ as A and B are in the 3rd quadrant find $\cos(A+B)$

@@33/65~

@@63/65

@@16/63

@@16/65

^^Given that sin A=-$\frac{5}{13}$ tan B= $\frac{3}{4}$ as A and B are in the 3rd quadrant find $\cos(A-B)$

@@63/65~

@@33/65

@@16/63

@@16/56

^^Given that sin A=-$\frac{5}{13}$ tan B= $\frac{3}{4}$ as A and B are in the 3rd quadrant find $\tan(A+B)$

@@56/33~

@@56/33

@@63/65

@@33/56

^^Given that sin A=-$\frac{5}{13}$ tan B= $\frac{3}{4}$ as A and B are in the 3rd quadrant find $\tan(A-B)$

@@-56/33

@@16/63

@@-16/63~

@@56/33

^^Given that sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$ where $180^o \angle A \leq 270^o and 270^o \angle B \leq 360^o$ find $\sin(A+B)$

@@16/65~

@@56/65

@@-56/65

@@-16/65

^^Given that sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$ where $180^o \angle A \leq 270^o and 270^o \angle B \leq 360^o$ find $\sin(A-B)$

@@16/65

@@56/65

@@-56/65~

@@-16/65

^^Given that sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$ where $180^o \angle A \leq 270^o and 270^o \angle B \leq 360^o$ find $\cos(A+B)$

@@-63/65~

@@33/65

@@16/63

@@16/65

^^Given that sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$ where $180^o \angle A \leq 270^o and 270^o \angle B \leq 360^o$ find $\cos(A-B)$

@@63/65

@@-33/65 ~

@@16/65

@@16/63

^^Given that sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$ where $180^o \angle A \leq 270^o and 270^o \angle B \leq 360^o$ find $\tan(A+B)$

@@63/65

@@-16/63 ~

@@33/65

@@33/56

^^Given that sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$ where $180^o \angle A \leq 270^o and 270^o \angle B \leq 360^o$ find $\tan(A-B)$

@@56/33

@@16/63 ~

@@-16/63

@@56/33~

<u>SECTION F</u>

^^If sin A= $\frac{5}{13}$ and tan B = $\frac{3}{4}$,A and B in quadrant 2 and 3 respectively find sin 2A

@@-120/169~

@@120/169

@@119/169

@@-119/169

^^If sin A=- $\frac{5}{13}$ and tan B= $\frac{3}{4}$, A and B in quadrant 2 and 3 respectively find cos 2A

@@-120/169

@@120/169

@@119/169~

@@-119/169

^^If sin A=- $\frac{5}{13}$ and tan B= $\frac{3}{4}$, A and B in quadrant 2 and 3 respectively find tan 2A

@@-120/119~

@@120/169

@@119/169

@@-119/169

^^If sin A=- $\frac{5}{13}$ and tan B= $\frac{3}{4}$, A and B in quadrant 2 and 3 respectively find sin 2B

@@24/25 ~

@@-24/25

@@7/25

@@-7/25

^^If sin A= - $\frac{5}{13}$ and tan B= $\frac{3}{4}$, A and B in quadrant 2 and 3 respectively find cos 2B

@@24/25

@@-24/25

@@7/25 ~

@@-7/25

^^If sin A= - $\frac{5}{13}$ and tan B= $\frac{3}{4}$, A and B in quadrant 2 and 3 respectively find tan 2B

@@24/7 ~

@@-24/7

@@7/24

@@-7/24

^^Given that sin A= $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B are in the 2^{nd} quadrant find sin 2A

@@-120/119 ~

@@120/169

@@119/169

@@-119/169

^^Given that sin A= $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B are in the 2nd quadrant find cos 2A

@@-120/119

@@120/169

@@119/169 ~

@@-119/169

^^Given that sin A= $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B are in the 2nd quadrant find tan 2A

@@-120/119 ~

@@120/119

@@-120/169

@@119/169

^^Given that sin A= $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B are in the 2nd quadrant find sin 2B

@@ -24/25 ~

@@24/25

@@-24/7

@@24/7

^^Given that sin A= $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B are in the 2nd quadrant find cos 2B

@@ 7/25 ~

@@24/25

@@-24/7

@@24/7

^^Given that sin A= $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B are in the 2nd quadrant find tan 2B

@@ -24/7 ~

@@24/7

@@7/25

@@25/7

^^If sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B in quadrant 3 and 4 respectively find sin 2A

@@-120/119

@@120/169 ~

@@-120/169

@@119/169

^^If sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B in quadrant 3 and 4 respectively find cos 2A

@@-120/169

@@119/169 ~

@@120/169

@@-119/169

^^If sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B in quadrant 3 and 4 respectively find tan 2A

@@-120/119

@@120/169

@@120/119 ~

@@-120/119

^^If sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B in quadrant 3 and 4 respectively find sin 2B

@@-24/25 ~

@@24/25

@@-24/7

@@24/7

^^If sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B in quadrant 3 and 4 respectively find cos 2B

@@24/25 ~

@@-24/25

@@7/25~

@@-7/25

^^If sin A= - $\frac{5}{13}$ and tan B= - $\frac{3}{4}$, A and B in quadrant 3 and 4 respectively find tan 2B

@@-7/24

@@7/24

@@-24/7 ~

@@24/7

SECTION G

^^If tan A = $\frac{5}{12}$ then tan ½A=

@@ -5, 1/5 ~

@@3, -1/3

@@5, -1/5

@@-3, 1/3

^^If tan B = $-\frac{3}{4}$ then tan ½B=

@@-5, 1/5

@@3, -1/3 ~

@@5, -1/5

@@-3, 1/3

^^If tan A = $-\frac{5}{12}$ then tan ½A=

@@-5, 1/5

@@3, -1/3

@@5, -1/5 ~

@@-3, 1/3

^^If tan B = $\frac{3}{4}$ then tan ½B=

@@-5, 1/5

@@3, -1/3

@@5, -1/5

@@-3, 1/3~

^^For what values of x is the equation $1+\cos x = 2\sin 2x$ where x is between 0^0 to 180^0

@@ (60°, 90°)

@@ (60°, 180°) ~

@@ (30°, 90°)

@@ (60°, 120°)

^^Given that sin θ + cos θ = $R\sin(\theta+\alpha)$ then the pair (R,α) is

@@ (2, 45°)

@@ ($\sqrt{2}$, 30°)

@@ ($\sqrt{2}$, 45°) ~

@@ ($\sqrt{3}$, 30°)

^^Given that 24cos θ + 7sin θ = $R\sin(\theta+\alpha)$ then R is

@@25 ~

@@24

@@30

@@36

^^Given that $\sqrt{3}$ sin θ - cos θ = $R\sin(\theta-\alpha)$ then the pair (R,α) is

@@ (2 , 30°) ~

@@ (2 , 45°)

@@ (2 , 60°)

@@ (2 , -30°)

^^Given that sin θ - $\sqrt{3}$ cos θ = $R\sin(\theta - \alpha)$ then the pair (R, α) is

@@ (2 , 60°) ~

@@ (2 , 45°)

@@ (2 , 90°)

@@ (2 , 30°)

^^Given that $\sqrt{3}$ cos θ + sin θ = $R\cos(\theta - \alpha)$ then the pair (R, α) is

@@ (2 , 30°) ~

@@ (2 , 45°)

@@ (2 , 60°)

@@ (2 , -30°)

^^Given that $\sqrt{2}$ cos θ - $\sqrt{2}$ sin θ = $R\cos(\theta + \alpha)$ then the pair (R, α) is

@@ (2 , 30°)

@@ (2 , 45°) ~

@@ (2 , 60°)

@@ (2 , -30°)

SECTION H

^^ If the distance between the points $P(1\ ,\ -3)$ and $Q(4\ ,k)$ is 5. Then the two possible values of k are

@@ 7 and -2

@@ 7 and 1

@@ $-7\ and\ 2$

@@$1\ and\ -7$ ~

@@2and 7

^^Find the coordinates of midpoint of the line joining (-1, 1) and (5, 7).

@@ $7,\ 11$

@@$5,\ 9$

@@$4\ ,\ 7$

@@ $2,\ 4$ ~

@@$2,\ 3$

^^The distance between $(1,\ -3)$ and $(4,\ 1)$is

@@5 ~

@@2

@@3

@@ -5

^^The distance between $(2,\ -1)$ and $(3,\ 4)$ is

@@25

@@$\sqrt{26}$~

@@5

@@$2\sqrt{5}$

^^ The polar form of the point $(1,\ 1)$ is

@@$(2,\ \frac{\pi}{4})$

@@$(\sqrt{2},\ 45°)$ ~

@@$(1,\ \frac{\pi}{4})$

@@$(\frac{\pi}{4},\ 2)$

^^ The distance between points (-3, 8) and (8, -5) is
@@ 19.03 units
@@ 11.03 units
@@ 15.03 units
@@ 17.03 units~

^^ The distance between points A (2, 2) and B (9, 11) is

@@ 11.4~

@@ 13.4

@@ 15.4

@@ 17.4

^^ If the distance between the points $M(1\ ,\ -3)\ and\ N(p\ ,1)\ is\ 5$. Then the two possible values of p are

@@ $4\ and\ -2$

@@ $4\ and\ 2$

@@ $-4\ and\ 2$~

@@ $1\ and\ -3$

^^ The polar coordinate of the point $A(\sqrt{3}\ ,\ -1)$ is

@@ $(2\ ,\frac{\pi}{3})$

@@ $(2\ ,\ \frac{\pi}{6})$

@@ $(2\ ,\ \frac{\pi}{4})$

@@ $(2\ ,\ \frac{-\pi}{6})$~

^^ The Cartesian coordinate of the point $M(1\ ,\ \frac{\pi}{4})$ is

@@ $(\frac{1}{\sqrt{2}}\ ,\ \frac{1}{\sqrt{2}})$~

@@ $(\frac{1}{\sqrt{2}}\ ,\ \frac{-2}{\sqrt{2}})$

@@ $(\sqrt{2}\ ,\ \sqrt{2})$

@@ $(\frac{-2}{\sqrt{2}},\ \sqrt{2})$

^^ The Cartesian coordinate of the point $M(2\ ,\ \frac{\pi}{4})$ is

@@ $(\frac{1}{\sqrt{2}}\ ,\ \frac{1}{\sqrt{2}})$

@@ $(\frac{1}{\sqrt{2}}\ ,\ \frac{-2}{\sqrt{2}})$

@@ $(\sqrt{2}\ ,\ \sqrt{2})$~

@@ $(\frac{-2}{\sqrt{2}},\ \sqrt{2})$

^^ The distance between $A(1,\ -1)$ and $B(-1,\ 1)$ is

@@ $2\sqrt{2}$~

@@ $4\sqrt{2}$

@@$\sqrt{10}$

@@ $-2\sqrt{10}$

^^The Cartesian coordinate of the point $P(2, \frac{\pi}{3})$ is

@@ $(1, \frac{1}{3})$

@@ $(\frac{1}{2}, \frac{1}{3})$

@@ $(\frac{2}{3}, \frac{1}{3})$

@@ $(\frac{1}{3}, \frac{2}{3})$ ~

^^ The Cartesian coordinate of the point $M(3, \frac{\pi}{4})$ is

@@$\left(\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}\right)$

@@ $(b)\ (\frac{3}{\sqrt{2}}, \frac{-3}{\sqrt{2}})$

@@ $(2, \sqrt{2})$

@@ $(b)\ (\frac{3}{\sqrt{2}}, \frac{3}{\sqrt{2}})$ ~

SECTION I

^^The slope the line $3x - 3y + 17 = 0$ is

@@-3

@@$\frac{1}{3}$

@@-1

@@1~

^^ If a line passes through point A(0, c) and has gradient 'm' then equation will be
@@ y = mx + c ~
@@ c = xy + m
@@m = xy + c
@@ cx = y + m
^^ Straight line equation $y - 5x = 2$ has gradient of

@@ $x + y$
@@ xy
@@ -5
@@ 5~
^^ The slope of the points $A(2, -1)$ and $B(3, 4)$ is

@@5 ~

@@3

@@-3

@@-5

^^ The slope of the points $A(1, -1)$ and $B(3, 3)$ is

@@4

@@2~

@@1

@@5

^^ The slope of the points $A(0, 0)$ and $B(0, 2)$ is

@@1

@@2

@@∞ ~

@@0

^^ The slope of the points $A(a, 0)$ and $B(2a, a)$ is

@@a

@@$2a$

@@1~

@@-a

^^ If $z_1 and\ z_2$ are the gradients of two parallel lines then

@@$z_1 = z_2$ ~

@@ $z_1 =- z_2$

@@$z_1 =- z_2^{-1}$

@@$z_1 z_2 = -1$

^^ Find the equation of a circle whose diameter $r = 3$ and centre is $(2, -3)$

@@ $(x + 2)^2 + (y - 3)^2 = 36$

@@ $(x - 2)^2 + (y + 3)^2 = 9$ ~

@@ $(x + 2)^2 + (y - 3)^2 = 36$

@@ $(x + 3)^2 + (y - 2)^2 = 9$

^^ The equation of a circle with centre at (0,-3) and radius $r = 5$ is

@@ $(x)^2 + (y - 3)^2 = 25$

@@ $(x)^2 + (y + 3)^2 = 25$ ~

@@ $x^2 + (y + 3)^2 = 100$

@@ $x^2 + (y - 3)^2 = -25$

^^ The coordinate of centre to the circle $x^2 + y^2 - 16x - 12y + 84 = 0$ is

@@$(-8, -6)$

@@ $(3, -6)$

@@$(-8, 2)$

@@$(8, 6)$ ~

^^ The radius of the circle $x^2 + y^2 - 16x - 12y + 84 = 0$ is

@@ 4 ~

@@ 6

@@ 16

@@ 3

^^ Any line parallel to the Y- axis has a zero gradient.

@@ True

@@ False ~

^^ Given the points A(2 ,5) and B(5,8) the coordinate of the point C which divides AB internally in `````the ratio 2:1 is

@@ (8, 11)

@@ (4, 7) ~

@@ (7, 4)

@@ (3, 5)

^^ The gradient of the line joining S(4, 8) and T(5,-2) is

@@ -2

@@ 8

@@ -8

@@ -10 ~

SECTION J

^^ If the centre of a circle of radius r is at the origin, then the equation to its tangent at (x_1, y_1) is

@@ $xx_1 + yy_1 =- r^2$

@@ $xx_1 + yy_1 = r^2$ ~

@@ $xy_1 + yx_1 = r^2$

@@ $xx_1 + yy_1 = r$

^^ The equation of the line through (1 , 0) which is parallel to the line $3y - 9x - 5 = 0$ is

@@ $y - 3x - 1 = 0$

@@ $y - 3x - 3 = 0$

@@ $y - 3x + 3 = 0$ ~

@@ $3y - 2x - 2 = 0$

^^ The equation of the straight line passing through point A(1, 1) at an angle 270^0 is

@@ $y - x - 2 = 0$

@@ $y + x - 2 = 0$

@@ $y = \infty$~

@@ $y = 0$

^^ If$d_1 and\ d_2$ are the gradient of two transverse lines then

@@$d_1 = d_2$

@@$d_1 =- d_2$

@@ $d_1 = d_2^{-1}$

@@ $d_1 d_2 =- 1$~

^^ The equation of the straight line passing through (1,1) and (-1,1) is

@@ $y = x + 1$

@@ $y = 0$

@@ $y = 1$

@@ $y =- 1$ ~

^^ The angle between line $- 8x + 4y + 7 = 0$ and $x - y = 0$ is

@@ π

@@$\frac{\pi}{2}$

@@ 0

@@$\frac{\pi}{4}$

^^ The equation of the line through (1, 0) which is parallel to the line $2y - 3x - 5 = 0$ is
@@ $3y - 2x + 2 = 0$
@@ $3y + 2x - 2 = 0$
@@ $2x - 3y + 2 = 0$
@@$2y - 3x + 3 = 0$~
^^ The equation of the line through (1, 0) which is perpendicular to the line
$2y - 3x - 5 = 0$ is
@@ $3y - 2x + 2 = 0$
@@ $3y + 2x - 2 = 0$
@@ $2x - 3y + 2 = 0$
@@$2y + 3x - 3 = 0$~
^^ The equation of normal to the circle $x^2 + y^2 - 4y + 1 = 0$ which passes through the point (1,1) is

@@ $y =- x$

@@ $y = x$~

@@ $y = x - 1$

@@ $y + 1 =- x$

^^ The equation of tangent to the circle $x^2 + y^2 - 4y + 1 = 0$ which passes through the point (1,1) is

@@ $y - x =- 2$

@@ $y = x - 2$

@@ $y = x + 2$~

@@ $y + 1 =- x$

^^ The equation of the straight line passing through point A(1, 1) at an angle with slop of $\frac{1}{2}$ is

@@ $2y - x - 1 = 0$~

@@ $y + 2x - 1 = 0$

@@ $y - x + 2 = 0$

@@ $y + x + 2 = 0$

^^ The equation of the straight line passing through point A(1, 1) at an angle with slop of $\frac{-1}{2}$ is

@@ $2y + x - 3 = 0$~

@@ $y + 2x - 3 = 0$

@@ $y - 2x + 3 = 0$

@@ $2y + x + 3 = 0$

^^ The angle between line $x + 4y =- 7$ and $y - 4x - 7 = 0$ is

@@ π

@@$\frac{\pi}{2}$~

@@ 0

@@$\frac{\pi}{6}$

^^ The angle between line $y - 2x = 6$ and $- 4x + 2y = 11$ is

@@ π

@@$\frac{\pi}{2}$

@@ 0~

@@$\frac{\pi}{6}$

^^ The equation of a straight line through the point (1, 1) with slope 135^0 is

@@y + x+1=0

@@y + x -2=0 ~

@@y- x+1=0

@@y– x-1=0

^^ Given the triangle ABC with coordinate points A(1,3) B(-7,6) and C(5,-1).The area of the triangle is

@@ 50 sq unit

@@ 6 sq unit

@@ 25 sq unit

@@ 10 sq unit ~

^^ The following lines 3x + 2y +1 = 0 and x - 3y + 5 = 0 meets at the point

@@ $\left(-\frac{12}{11}, \frac{13}{11}\right)$

@@ $\left(\frac{14}{11}, \frac{13}{11}\right)$

@@ $\left(-\frac{13}{11}, \frac{14}{11}\right)$~

@@ $\left(\frac{13}{11}, -\frac{14}{11}\right)$

^^ The equation of the tangent to the circle $x^2 + y^2 - 6x + 2y - 15 = 0$ at the point (2,1) is

@@$y - x - 15 = 0$

@@ $2y + x - 20 = 0$

@@$2y - x - 20 = 0$ ~

@@$y + 2x - 6 = 0$

^^ A 17 ft ladder against a wall has its foot 8ft from the base of the wall. At what height is the top of the ladder touching the wall?

@@ 9ft

@@ 15 ft ~

@@ 25 ft

@@ 13 ft

^^A 17 ft ladder against a wall has a height of 15ft. What is the distance between the base of the wall and the foot of the ladder

@@ 9ft

@@ 8 ft ~

@@ 25 ft

@@ 13 ft

^^If the slope of a line is $Q1$, then the slope of the line perpendicular to it is?

@@ $Q1$

@@ $-\ Q1$

@@ $-\frac{1}{Q1}$ ~

@@ $\frac{1}{Q1}$