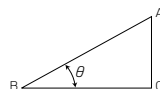


| $\theta$ (シータ) |  | 角度=24° 00'~35° 50'の場合 |               |               |               |                |
|----------------|--|-----------------------|---------------|---------------|---------------|----------------|
| 角度             |  | $\sin \theta$         | $\cos \theta$ | $\tan \theta$ | $\cot \theta$ |                |
| 24° 00'        |  | .4067                 | .9135         | .4452         | 2.2460        | 66° 00'        |
| 10             |  | .4094                 | .9124         | .4487         | 2.2286        | 50             |
| 20             |  | .4120                 | .9112         | .4522         | 2.2113        | 40             |
| 30             |  | .4147                 | .9100         | .4557         | 2.1943        | 30             |
| 40             |  | .4173                 | .9088         | .4592         | 2.1775        | 20             |
| 50             |  | .4200                 | .9075         | .4628         | 2.1609        | 10             |
| 25° 00'        |  | .4226                 | .9063         | .4663         | 2.1445        | 65° 00'        |
| 10             |  | .4253                 | .9051         | .4699         | 2.1283        | 50             |
| 20             |  | .4279                 | .9038         | .4734         | 2.1123        | 40             |
| 30             |  | .4305                 | .9026         | .4770         | 2.0965        | 30             |
| 40             |  | .4331                 | .9013         | .4806         | 2.0809        | 20             |
| 50             |  | .4358                 | .9001         | .4841         | 2.0655        | 10             |
| 26° 00'        |  | .4384                 | .8988         | .4877         | 2.0503        | 64° 00'        |
| 10             |  | .4410                 | .8975         | .4913         | 2.0353        | 50             |
| 20             |  | .4436                 | .8962         | .4950         | 2.0204        | 40             |
| 30             |  | .4462                 | .8949         | .4986         | 2.0057        | 30             |
| 40             |  | .4488                 | .8936         | .5022         | 1.9912        | 20             |
| 50             |  | .4514                 | .8923         | .5059         | 1.9768        | 10             |
| 27° 00'        |  | .4540                 | .8910         | .5095         | 1.9626        | 63° 00'        |
| 10             |  | .4566                 | .8897         | .5132         | 1.9486        | 50             |
| 20             |  | .4592                 | .8884         | .5169         | 1.9347        | 40             |
| 30             |  | .4617                 | .8870         | .5206         | 1.9210        | 30             |
| 40             |  | .4643                 | .8857         | .5243         | 1.9074        | 20             |
| 50             |  | .4669                 | .8843         | .5280         | 1.8940        | 10             |
| 28° 00'        |  | .4695                 | .8829         | .5317         | 1.8807        | 62° 00'        |
| 10             |  | .4720                 | .8816         | .5354         | 1.8676        | 50             |
| 20             |  | .4746                 | .8802         | .5392         | 1.8546        | 40             |
| 30             |  | .4772                 | .8788         | .5430         | 1.8418        | 30             |
| 40             |  | .4797                 | .8774         | .5467         | 1.8291        | 20             |
| 50             |  | .4823                 | .8760         | .5505         | 1.8165        | 10             |
| 29° 00'        |  | .4848                 | .8746         | .5543         | 1.8040        | 61° 00'        |
| 10             |  | .4874                 | .8732         | .5581         | 1.7917        | 50             |
| 20             |  | .4899                 | .8718         | .5619         | 1.7796        | 40             |
| 30             |  | .4924                 | .8704         | .5658         | 1.7675        | 30             |
| 40             |  | .4950                 | .8689         | .5696         | 1.7556        | 20             |
| 50             |  | .4975                 | .8675         | .5735         | 1.7437        | 10             |
| 30° 00'        |  | .5000                 | .8660         | .5774         | 1.7321        | 60° 00'        |
| 10             |  | .5025                 | .8646         | .5812         | 1.7205        | 50             |
| 20             |  | .5050                 | .8631         | .5851         | 1.7090        | 40             |
| 30             |  | .5075                 | .8616         | .5890         | 1.6977        | 30             |
| 40             |  | .5100                 | .8601         | .5930         | 1.6864        | 20             |
| 50             |  | .5125                 | .8587         | .5969         | 1.6753        | 10             |
| 31° 00'        |  | .5150                 | .8572         | .6009         | 1.6643        | 59° 00'        |
| 10             |  | .5175                 | .8557         | .6048         | 1.6534        | 50             |
| 20             |  | .5200                 | .8542         | .6088         | 1.6426        | 40             |
| 30             |  | .5225                 | .8526         | .6128         | 1.6319        | 30             |
| 40             |  | .5250                 | .8511         | .6168         | 1.6212        | 20             |
| 50             |  | .5275                 | .8496         | .6208         | 1.6107        | 10             |
| 32° 00'        |  | .5299                 | .8480         | .6249         | 1.6003        | 58° 00'        |
| 10             |  | .5324                 | .8465         | .6289         | 1.5900        | 50             |
| 20             |  | .5348                 | .8450         | .6330         | 1.5798        | 40             |
| 30             |  | .5373                 | .8434         | .6371         | 1.5697        | 30             |
| 40             |  | .5398                 | .8418         | .6412         | 1.5597        | 20             |
| 50             |  | .5422                 | .8403         | .6453         | 1.5497        | 10             |
| 33° 00'        |  | .5446                 | .8387         | .6494         | 1.5399        | 57° 00'        |
| 10             |  | .5471                 | .8371         | .6536         | 1.5301        | 50             |
| 20             |  | .5495                 | .8355         | .6577         | 1.5204        | 40             |
| 30             |  | .5519                 | .8339         | .6619         | 1.5108        | 30             |
| 40             |  | .5544                 | .8323         | .6661         | 1.5013        | 20             |
| 50             |  | .5568                 | .8307         | .6703         | 1.4919        | 10             |
| 34° 00'        |  | .5592                 | .8290         | .6745         | 1.4826        | 56° 00'        |
| 10             |  | .5616                 | .8274         | .6787         | 1.4733        | 50             |
| 20             |  | .5640                 | .8258         | .6830         | 1.4641        | 40             |
| 30             |  | .5664                 | .8241         | .6873         | 1.4550        | 30             |
| 40             |  | .5688                 | .8225         | .6916         | 1.4460        | 20             |
| 50             |  | .5712                 | .8208         | .6959         | 1.4370        | 10             |
| 35° 00'        |  | .5736                 | .8192         | .7002         | 1.4281        | 55° 00'        |
| 10             |  | .5760                 | .8175         | .7046         | 1.4193        | 50             |
| 20             |  | .5783                 | .8158         | .7089         | 1.4106        | 40             |
| 30             |  | .5807                 | .8141         | .7133         | 1.4019        | 30             |
| 40             |  | .5831                 | .8124         | .7177         | 1.3934        | 20             |
| 50             |  | .5854                 | .8107         | .7221         | 1.3848        | 10             |
|                |  | $\cos \theta$         | $\sin \theta$ | $\cot \theta$ | $\tan \theta$ | $\theta$ (シータ) |
|                |  | 角度=54° 10'~66° 00'の場合 |               |               |               | 角度             |

| $\theta$ (シータ) |  | 角度=36° 00'~45° 00'の場合 |               |               |               |                |
|----------------|--|-----------------------|---------------|---------------|---------------|----------------|
| 角度             |  | $\sin \theta$         | $\cos \theta$ | $\tan \theta$ | $\cot \theta$ |                |
| 36° 00'        |  | .5878                 | .8090         | .7265         | 1.3764        | 54° 00'        |
| 10             |  | .5901                 | .8073         | .7310         | 1.3680        | 50             |
| 20             |  | .5925                 | .8056         | .7355         | 1.3597        | 40             |
| 30             |  | .5948                 | .8039         | .7400         | 1.3514        | 30             |
| 40             |  | .5972                 | .8021         | .7445         | 1.3432        | 20             |
| 50             |  | .5995                 | .8004         | .7490         | 1.3351        | 10             |
| 37° 00'        |  | .6018                 | .7986         | .7536         | 1.3270        | 53° 00'        |
| 10             |  | .6041                 | .7969         | .7581         | 1.3190        | 50             |
| 20             |  | .6065                 | .7951         | .7627         | 1.3111        | 40             |
| 30             |  | .6088                 | .7934         | .7673         | 1.3032        | 30             |
| 40             |  | .6111                 | .7916         | .7720         | 1.2954        | 20             |
| 50             |  | .6134                 | .7898         | .7766         | 1.2876        | 10             |
| 38° 00'        |  | .6157                 | .7880         | .7813         | 1.2799        | 52° 00'        |
| 10             |  | .6180                 | .7862         | .7860         | 1.2723        | 50             |
| 20             |  | .6202                 | .7844         | .7907         | 1.2647        | 40             |
| 30             |  | .6225                 | .7826         | .7954         | 1.2572        | 30             |
| 40             |  | .6248                 | .7808         | .8002         | 1.2497        | 20             |
| 50             |  | .6271                 | .7790         | .8050         | 1.2423        | 10             |
| 39° 00'        |  | .6293                 | .7771         | .8098         | 1.2349        | 51° 00'        |
| 10             |  | .6316                 | .7753         | .8146         | 1.2276        | 50             |
| 20             |  | .6338                 | .7735         | .8195         | 1.2203        | 40             |
| 30             |  | .6361                 | .7716         | .8243         | 1.2131        | 30             |
| 40             |  | .6383                 | .7698         | .8292         | 1.2059        | 20             |
| 50             |  | .6406                 | .7679         | .8342         | 1.1988        | 10             |
| 40° 00'        |  | .6428                 | .7660         | .8391         | 1.1918        | 50° 00'        |
| 10             |  | .6450                 | .7642         | .8441         | 1.1847        | 50             |
| 20             |  | .6472                 | .7623         | .8491         | 1.1778        | 40             |
| 30             |  | .6494                 | .7604         | .8541         | 1.1708        | 30             |
| 40             |  | .6517                 | .7585         | .8591         | 1.1640        | 20             |
| 50             |  | .6539                 | .7566         | .8642         | 1.1571        | 10             |
| 41° 00'        |  | .6561                 | .7547         | .8693         | 1.1504        | 49° 00'        |
| 10             |  | .6583                 | .7528         | .8744         | 1.1436        | 50             |
| 20             |  | .6604                 | .7509         | .8796         | 1.1369        | 40             |
| 30             |  | .6626                 | .7490         | .8847         | 1.1303        | 30             |
| 40             |  | .6648                 | .7470         | .8899         | 1.1237        | 20             |
| 50             |  | .6670                 | .7451         | .8952         | 1.1171        | 10             |
| 42° 00'        |  | .6691                 | .7431         | .9004         | 1.1106        | 48° 00'        |
| 10             |  | .6713                 | .7412         | .9057         | 1.1041        | 50             |
| 20             |  | .6734                 | .7392         | .9110         | 1.0977        | 40             |
| 30             |  | .6756                 | .7373         | .9163         | 1.0913        | 30             |
| 40             |  | .6777                 | .7353         | .9217         | 1.0850        | 20             |
| 50             |  | .6799                 | .7333         | .9271         | 1.0786        | 10             |
| 43° 00'        |  | .6820                 | .7314         | .9325         | 1.0724        | 47° 00'        |
| 10             |  | .6841                 | .7294         | .9380         | 1.0661        | 50             |
| 20             |  | .6862                 | .7274         | .9435         | 1.0599        | 40             |
| 30             |  | .6884                 | .7254         | .9490         | 1.0538        | 30             |
| 40             |  | .6905                 | .7234         | .9545         | 1.0477        | 20             |
| 50             |  | .6926                 | .7214         | .9601         | 1.0416        | 10             |
| 44° 00'        |  | .6947                 | .7193         | .9657         | 1.0355        | 46° 00'        |
| 10             |  | .6967                 | .7173         | .9713         | 1.0295        | 50             |
| 20             |  | .6988                 | .7153         | .9770         | 1.0235        | 40             |
| 30             |  | .7009                 | .7133         | .9827         | 1.0176        | 30             |
| 40             |  | .7030                 | .7112         | .9884         | 1.0117        | 20             |
| 50             |  | .7050                 | .7092         | .9942         | 1.0058        | 10             |
| 45° 00'        |  | .7071                 | .7071         | 1.0000        | 1.0000        | 45° 00'        |
|                |  | $\cos \theta$         | $\sin \theta$ | $\cot \theta$ | $\tan \theta$ | $\theta$ (シータ) |
|                |  | 角度=45° 00'~54° 00'の場合 |               |               |               | 角度             |



$$\begin{aligned} \sin \theta &= AC / AB & \operatorname{cosec} \theta &= AB / AC \\ \cos \theta &= BC / AB & \sec \theta &= AB / BC \\ \tan \theta &= AC / BC & \cot \theta &= BC / AC \end{aligned}$$

|               | $\gamma$ の範囲 |            |             |             | $\gamma =$        |                       |                        |                        |
|---------------|--------------|------------|-------------|-------------|-------------------|-----------------------|------------------------|------------------------|
|               | 0° ~ 90°     | 90° ~ 180° | 180° ~ 270° | 270° ~ 360° | $\pm \alpha$      | $90^\circ \pm \alpha$ | $180^\circ \pm \alpha$ | $270^\circ \pm \alpha$ |
| $\sin \gamma$ | +            | +          | -           | -           | $\pm \sin \alpha$ | $\pm \cos \alpha$     | $\mp \sin \alpha$      | $-\cos \alpha$         |
| $\cos \gamma$ | +            | -          | -           | +           | $\pm \cos \alpha$ | $\mp \sin \alpha$     | $-\cos \alpha$         | $\pm \sin \alpha$      |
| $\tan \gamma$ | +            | -          | +           | +           | $\pm \tan \alpha$ | $\pm \cot \alpha$     | $\mp \tan \alpha$      | $\mp \cot \alpha$      |
| $\cot \gamma$ | +            | -          | +           | +           | $\pm \cot \alpha$ | $\pm \tan \alpha$     | $\mp \cot \alpha$      | $\mp \tan \alpha$      |