|  |  |
| --- | --- |
| **Decode the Joke** | **Trigonometric Ratios** |

Express each of the following as the trigonometric ratio of an acute angle.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **A** | $$\sin(400)$$ |  |  | **N** | $$\cos(355)$$ |  |
| **B** | $$\cos((-300))$$ |  |  | **O** | $$\sin(245)$$ |  |
| **C** | $$\tan(260)$$ |  |  | **P** | $$\tan((100))$$ |  |
| **D** | $$\cos(750)$$ |  |  | **Q** | $$\cos((-75))$$ |  |
| **E** | $$\tan(410)$$ |  |  | **R** | $$\sin((-105))$$ |  |
| **F** | $$\sin((-700))$$ |  |  | **S** | $$\cos(200)$$ |  |
| **G** | $$\tan((-290))$$ |  |  | **T** | $$\tan((-505))$$ |  |
| **H** | $$\cos((-315))$$ |  |  | **U** | $$\sin(1280)$$ |  |
| **I** | $$\sin(125)$$ |  |  | **V** | $$\tan(330)$$ |  |
| **J** | $$\tan(195)$$ |  |  | **W** | $$\cos((-275))$$ |  |
| **K** | $$\cos(320)$$ |  |  | **X** | $$\sin((-555))$$ |  |
| **L** | $$\cos(125)$$ |  |  | **Y** | $$\tan(1075)$$ |  |
| **M** | $$\tan((-25))$$ |  |  | **Z** | $$\cos((-980))$$ |  |

Now decode the joke….

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| $$\cos(85)$$ | $$\cos(45)$$ | $$-\tan(5)$$ |  | $$\cos(30)$$ | $$\sin(55)$$ | $$\cos(30)$$ |  | $$\tan(35)$$ | $$\cos(45)$$ | $$\tan(50)$$ |
|  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| $$-\cos(20)$$ | $$\tan(35)$$ | $$-\sin(20)$$ | $$\cos(30)$$ | $$\tan(50)$$ | $$\cos(5)$$ | $$\tan(35)$$ |  | $$\cos(30)$$ | $$\sin(55)$$ | $$-\tan(30)$$ |
|  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| $$\sin(55)$$ | $$\cos(30)$$ | $$\tan(50)$$ |  | $$-\cos(20)$$ | $$\sin(55)$$ | $$\cos(5)$$ |  | $$\cos(60)$$ | $$-\tan(5)$$ |  | $$\tan(35)$$ |
|  |  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| $$\sin(40)$$ | $$\cos(5)$$ | ? |  | $$\tan(15)$$ | $$-\sin(20)$$ | $$-\cos(20)$$ | $$\tan(35)$$ |  | $$\tan(80)$$ | $$-\sin(65)$$ | $$-\cos(20)$$ |
|  |  |  |  |  |  |  |  |  |  |  |  |