

The first nine questions are true or false while the tenth question is fill in the blanks.

- ✓ I 1. The exact value of 1.1^4 is 1.4641.
- ✓ F 2. When $x^3 + 2x^2 + 3x + 4$ is divided by $x + 1$ the remainder is 10.
- ✓ I 3. $\log_2(\sin 45^\circ + \cos 45^\circ) = 0.5$.
- ✓ I 4. If $(2 - 3i)^5 = 122 + 597i$ then $(2 + 3i)^5 = 122 - 597i$.
- ✓ I 5. The maximum value of the quadratic function $f(x) = 12 - 4x - x^2$ is 16.
- ✓ F 6. The angle of inclination for the line $x - \sqrt{3}y = 0$ is 60° .
- ✓ I 7. If $f(x)$ is a polynomial with $f(0.5) = 0$ then $2x - 1$ is a factor of $f(x)$.
- ✓ I 8. If $\frac{3x+1}{x-1} = a + \frac{b}{x-1}$ for constants a and b then $a = 3$ and $b = 4$.
- ✓ I 9. The result illustrated in the commutative diagram is true.
10. Fill in the three blanks for the fundamental diagram of trigonometry given below.

