

# Homework

Sunday, October 12, 2025 9:56 AM

Object Identifier	test-1(nominal)	test-2 (ordinal)	test-3 (numeric)
1	A 1	excellent 1	45
2	B 0.5	fair 0	22
3	C 0	good 0.5	64
4	A 1	excellent 1	28

$$d_1 = 1 - 0 = 1$$

$$d_2 = \frac{1 - 0.5}{1 - 0} = \frac{0.5}{1} = 0.5$$

$$d_3 = \frac{64 - 45}{64 - 22} = \frac{19}{42} = 0.45$$

$$\frac{1(1) + 1(0.5) + 1(0.45)}{1 + 1 + 1} = \frac{1.95}{3} = 0.65$$

$$|13-10| + |16-2| + |23-25| + |13-6|$$

$$3+14+2+7=26$$

$$\text{Sqrt}(|13-10|^2 + |16-2|^2 + |23-25|^2 + |13-6|^2)$$

$$\text{Sqrt}(3^2 + 14^2 + 2^2 + 7^2)$$

$$\text{Sqrt}(9 + 196 + 4 + 49)$$

$$\text{Sqrt}(258) = 16.06237840420901$$

	Passed	Failed	Total
Attended	25	6	31
Skipped	8	15	23
<b>Total</b>	<b>33</b>	<b>21</b>	<b>54</b>

$$\text{Expected Attend-Pass} = 33 \cdot 31 / 54 = 18.9444$$

$$\text{Expected Attend-Fail} = 21 \cdot 31 / 54 = 12.0556$$

$$\text{Expected Skip-Pass} = 33 \cdot 23 / 54 = 14.0556$$

$$\text{Expected skip-fail} = 21 \cdot 23 / 54 = 8.9444$$

$$(25-18.94)^2/18.94 = 1.9389$$

$$(6-12.06)^2/12.06 = 3.0451$$

$$(8-14.06)^2/14.06 = 2.6119$$

$$(15-8.94)^2/8.94 = 4.1078$$

$$1.9289+3.0451+2.6119+4.1078 = 11.6937$$

There is a low dependency between attendance and passing a class