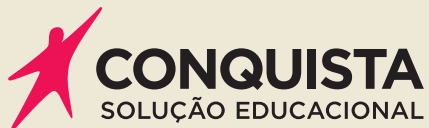




Prof. Conceição Longo



Matemática

Semana 2 - 2º semestre

7º EF2

**Neste Guia você vai estudar sobre
média estatística.**

Pág. 02 a 12 do Volume 3

Prof. Conceição Longo

Saudades da escola e dos amigos? Saiba que você não é o único. Nesse momento, é necessário nos mantermos assim. Vai passar.

Que tal hoje você ser o professor e aprender como as notas escolares podem ser calculadas? Vamos lá! Sua aluna Manu te fez a seguinte pergunta:



Tirei 7, 8 e 6 nas provas aplicadas, qual será a minha média?

I - Para encontrar a resposta, faça o cálculo da média aritmética = $\frac{x_1 + x_2 + x_3}{3}$

Sendo x_1 a nota da prova 1, x_2 a nota da prova 2 e x_3 a nota da prova 3

Nem todas as provas têm a mesma importância, por isso, vamos atribuir pesos diferentes a elas.

A primeira prova terá peso 2, a segunda prova peso 3 e a terceira prova terá peso 2. Veja as anotações de Mano e calcule a média das suas provas.

Prova 1 - peso 2 - Nota 7
Prova 2 - peso 3 - Nota 8
Prova 3 - peso 2 - Nota 6

III - Para encontrar a resposta, faça o cálculo da média aritmética ponderada = $\frac{p_1x_1+p_2x_2+p_3x_3}{p_1+p_2+p_3}$

Sendo x_1 o peso da prova 1, x_2 o peso da prova 2, x_3 o peso da prova 3 e x_1 a nota da prova 1, x_2 a nota da prova 2 e x_3 a nota da prova 3.

Uma classe com dez alunos

Os quadros a seguir trazem as notas dos alunos da sua sala de aula. Crie um nome para seus alunos e calcule a média aritmética de cada um deles.

Aluno	Prova 1	Prova 2	Prova 3	Média
1.	6,0	6,0	9,0	
2.	4,0	5,0	6,0	
3.	5,0	7,0	6,0	
4.	6,0	8,0	7,0	
5.	8,0	9,0	7,0	

Aluno	Prova 1	Prova 2	Prova 3	Média
6.	5,0	9,0	10,0	
7.	3,0	4,0	5,0	
8.	5,0	8,0	8,0	
9.	6,0	4,0	5,0	
10.	7,0	6,0	2,0	

Agora, calcule a média aritmética ponderada de seus alunos. Para isso, iremos considerar: Prova 1 – peso 1; Prova 2 – peso 2 e Prova 3 – peso 3.

Aluno	Prova 1 Peso 1	Prova 2 Peso 2	Prova 3 Peso 3	Média ponderada
1.	6,0	6,0	9,0	
2.	4,0	5,0	6,0	
3.	5,0	7,0	6,0	
4.	6,0	8,0	7,0	
5.	8,0	9,0	7,0	

Aluno	Prova 1 Peso 1	Prova 2 Peso 2	Prova 3 Peso 3	Média ponderada
6.	5,0	9,0	10,0	
7.	3,0	4,0	5,0	
8.	5,0	8,0	8,0	
9.	6,0	4,0	5,0	
10.	7,0	6,0	2,0	

CONFIRA SUAS RESPOSTAS:

$$\text{I - Média aritmética} = \frac{7+8+6}{3} = \frac{21}{3} = 7$$

$$\text{III - Média aritmética ponderada} = \frac{2 \cdot 7 + 3 \cdot 8 + 2 \cdot 6}{2+3+2} = \frac{14+24+12}{7} = \frac{50}{7} = 7,14$$

Uma classe com dez alunos

Aluno	Prova 1	Prova 2	Prova 3	Média
1.	6,0	6,0	9,0	7,0
2.	4,0	5,0	6,0	5,0
3.	5,0	7,0	6,0	6,0
4.	6,0	8,0	7,0	7,0
5.	8,0	9,0	7,0	8,0

Aluno	Prova 1	Prova 2	Prova 3	Média
1.	6,0	6,0	9,0	7,0
2.	4,0	5,0	6,0	5,0
3.	5,0	7,0	6,0	6,0
4.	6,0	8,0	7,0	7,0
5.	8,0	9,0	7,0	8,0

Aluno	Prova 1	Prova 2	Prova 3	Média
1.	6,0	6,0	9,0	7,0
2.	4,0	5,0	6,0	5,0
3.	5,0	7,0	6,0	6,0
4.	6,0	8,0	7,0	7,0
5.	8,0	9,0	7,0	8,0

Aluno	Prova 1 Peso 1	Prova 2 Peso 2	Prova 3 Peso 3	Média ponderada
6.	5,0	9,0	10,0	8,8
7.	3,0	4,0	5,0	4,3
8.	5,0	8,0	8,0	7,5
9.	6,0	4,0	5,0	4,8
10.	7,0	6,0	2,0	4,1