

WEIGHTED MEAN

- When certain #'s / values are worth more OR less than others

ex: A test mark VS an exam mark

HOW TO DO IT:

TESTS (30%) (weight)

$\bar{X} = 58\%$

x.30

= 17.4

QUIZZES (20%) (weight)

$\bar{X} = 72\%$

x.20

= 14.4

FINAL EXAM (50%) (weight)

$\bar{X} = 70\%$

x.50

= 35

$$17.4 + 14.4 + 35 = 66.8\%$$

Multiply each mark by its' decimal weight and add up the weighted marks

MISSING # IN MEAN

FORMULA = $\div \frac{\text{TOTAL DATA ADDED UP}}{\text{\# OF DATA}} = \text{DESIRED MEAN}$

EX: If you were to take 2 tests and wanted an average of 80%..here's what the total should be: total % of 2 tests = 80% (average)

2 tests

so..... $\frac{x\%}{2} = 80\%$ **CROSS X!....the two tests must = 160%**

EX: Josh has 3 tests done and want to know what he should get on the 4th test next week to get an 85% average.

His marks so far: 66%, 90%, 88%

$66 + 90 + 88 + ? = 85\%$
4 tests

soo his total score must be 340%....He has

244% with 3 tests...he needs a 96% to = 340%= 85%

(avrg)