



Grade 12 Data Management Unit Test

Name _____ Date _____ Score _____ / 16

Part A · Mean, Median, Mode & Range

01 Mean of 12, 4, 8 = _____

02 Mean of 4, 14, 12 = _____

03 Mean of 15, 11, 7 = _____

04 Mean of 5, 22, 34, 6, 3 = _____

Part B · Probability

05 Percent: A bag has 5 red and 1 blue marble. $P(\text{blue}) =$

Answer: _____

06 Percent: A bag has 10 red and 10 blue marbles. $P(\text{red}) =$

Answer: _____

07 Decimal: A bag has 10 red and 2 blue marbles. One is drawn and not replaced. Given the first marble drawn is red, $P(\text{the second is also red}) =$

Answer: _____

08 Percent: A bag has 10 red and 10 blue marbles. One is drawn and not replaced. Given the first marble drawn is red, $P(\text{the second is also red}) =$

Answer: _____



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Part C · Permutations & Combinations

Read each question carefully. They're not all the same kind of question.

09 ${}_8C_4 =$ _____

10 ${}_9P_2 =$ _____

11 ${}_nC_3 = 20$, find n _____

12 $6! \div 3! =$ _____

Part D · Binomial Theorem

13 In the expansion of $(x + y)^{10}$, what is the coefficient of the term with x^4y^6 ?

Answer: _____

14 In the expansion of $(x + y)^5$, what is the coefficient of the term with x^2y^3 ?

Answer: _____

15 In the expansion of $(x + y)^{10}$, what is the coefficient of the term with x^6y^4 ?

Answer: _____

16 In the expansion of $(x + y)^8$, what is the coefficient of the term with x^2y^6 ?

Answer: _____



Grade 12 Data Management Unit Test (Answer Key)

Part A · Mean, Median, Mode & Range

01 Mean of 12, 4, 8 = **8**

02 Mean of 4, 14, 12 = **10**

03 Mean of 15, 11, 7 = **11**

04 Mean of 5, 22, 34, 6, 3 = **14**

Part B · Probability

05 Percent: A bag has 5 red and 1 blue marble. $P(\text{blue}) =$
 $\approx 16.7\%$ ($1/6$, ≈ 0.17)

06 Percent: A bag has 10 red and 10 blue marbles. $P(\text{red}) =$
 50.0% ($1/2$, 0.50)

07 Decimal: A bag has 10 red and 2 blue marbles. One is drawn and not replaced. Given the first marble drawn is red, $P(\text{the second is also red}) =$
 ≈ 0.8182 ($9/11$, $\approx 81.82\%$)

08 Percent: A bag has 10 red and 10 blue marbles. One is drawn and not replaced. Given the first marble drawn is red, $P(\text{the second is also red}) =$
 $\approx 47.37\%$ ($9/19$, ≈ 0.4737)



Grade 12 Data Management Unit Test (Answer Key)

Part C · Permutations & Combinations

Read each question carefully. They're not all the same kind of question.

09 ${}_8C_4 = 70$

10 ${}_9P_2 = 72$

11 ${}_nC_3 = 20$, find n **6**

12 $6! \div 3! = 120$

Part D · Binomial Theorem

13 In the expansion of $(x + y)^{10}$, what is the coefficient of the term with x^4y^6 ?

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14 In the expansion of $(x + y)^5$, what is the coefficient of the term with x^2y^3 ?

10

15 In the expansion of $(x + y)^{10}$, what is the coefficient of the term with x^6y^4 ?

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16 In the expansion of $(x + y)^8$, what is the coefficient of the term with x^2y^6 ?

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