

$$1. (3 + 2)^2 = 5^2 = 25$$

$$2. \frac{6+6+4+4}{4} = \frac{20}{4} = 5$$

$$3. \frac{10-6}{4} = \frac{4}{4} = 1$$

$$4. \frac{15}{6-1} = \frac{15}{5} = 3$$

$$5. \frac{(2+2)^2}{8} = \frac{4^2}{8} = \frac{16}{8} = 2$$

$$6. \frac{3}{5}(5) + \frac{2}{5}(10) = 3 + 4 = 7$$

$$7. \sqrt{81} = 9$$

$$8. \sqrt{\frac{(5-5)^2+(6-5)^2+(4-5)^2}{3}} = \sqrt{\frac{(0)^2+(1)^2+(-1)^2}{3}} = \sqrt{\frac{0+1+1}{3}} = \sqrt{\frac{2}{3}} = 0816$$

Use the following values: $x_1 = 2, x_2 = 3, x_3 = 5, x_4 = 6$

$$9. \sum x_i = 2+3+5+6 = 16$$

$$10. \sum x_i^2 = 2^2 + 3^2 + 5^2 + 6^2 = 4 + 9 + 25 + 36 = 74$$

$$11. \frac{\sum x_i}{4} = \frac{2+3+5+6}{4} = \frac{16}{4} = 4$$

$$12. \sum(x_i - 1) = (2 - 1) + (3 - 1) + (5 - 1) + (6 - 1) = 1 + 2 + 4 + 5 = 12$$

Use the following five values for X: 4,5,6,6,7, for questions 13-16.

$$13. \sum X_i = 4 + 5 + 6 + 6 + 7 = 28$$

$$14. \sum X_i^2 = 4^2 + 5^2 + 6^2 + 6^2 + 7^2 = 16 + 25 + 36 + 36 + 49 = 162$$

$$15. (\sum X_i)^2 = (28)^2 = 784$$

$$16. \sum (X_i - 4)^2 = (4 - 4)^2 + (5 - 4)^2 + (6 - 4)^2 + (6 - 4)^2 + (7 - 4)^2 = 0^2 + 1^2 + 2^2 + 2^2 + 3^2 = 0 + 1 + 4 + 4 + 9 = 18$$

$$17. 3! = 3 * 2 * 1 = 6$$

$$18. 7! = 7 * 6 * 5 * 4 * 3 * 2 * 1 = 5040$$

$$19. 0! = 1$$

$$20. \frac{5!}{3!(5-3)!} = \frac{5*4*3*2*1}{(3*2*1)(2*1)} = \frac{5*4}{2} = \frac{20}{2} = 10$$

$$21. \frac{4!}{0!(4-0)!} = \frac{4*3*2*1}{1(4*3*2*1)} = 1$$