Exam Review: Chapter 4 Math 12 Foundations Name:\_\_\_\_\_\_\_\_\_\_\_\_

1. A person getting dressed can select from blue jeans or khaki pants and dress shirt, T shirt or golf shirt. How many different ways can he get dressed.

1. How many ways can a computer system be assembled if there is a choice of five computers, three monitors, five printers and two multi media players?



1. How many three digit numbers are there if:

a) repeats are allowed b) repeats are not allowed

1. Try these: Simplify and solve (if you can)

$\frac{17!}{15!}$ $\frac{\left(n+3\right)!\left(n+2\right)!}{\left(n+1\right)!}$ $\frac{\left(n+1\right)\left(n+2\right)!}{\left(n+1\right)!}$

1. How many permutations are there of the word SQUARE?



1. How many three letter permutations are there? (think counting principle)



1. How many four letter permutations are there?

8. How many different permutations are there of 5 objects from a set of 7 different objects (repetition not allowed)

9. A truck license plate has two letters followed by four digits. How many license plates are possible if:

a) repeats are allowed b) no repeats are allowed



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10.How many pathways are possible going from A to B (only travelling S or E)

11. How many 3 person committees can be chosen from a group of 7 people?





12. How many ways can a president and vice-president be selected from a group of 7 people?

13. How many ways can a 3 person committee be chosen from a group of 7 people if Bill Smith must be on the committee?





14. How many ways can a 3 person committee be chosen from a group of 4 women and 3 men if the committee must have exactly 2 women and 1 man?



