Consider transmitting the following 16x16 bit pictures over the network. How many bits are required to transmit each picture via various compression schemes?

Blank: AAAA AAAA AAAA AAAA AAAA AAAA AAAA AAAA where A = 0000 0000

Three-Dots: AAAA BAAA AAAA ACAA AAAA AAAA AAAA AAAA AADA where A = 0000 0000, B = 0100 0000, C = 0000 0100, D = 0000 0001

Checkerboard: AABB AABB AABB AABB AABB AABB AABB AABB where A = 0101 0101, B = 1010 1010

Rectangle: AAAA AABC DEDE DEDE DEBC AAAA AAAA AAAA where A = 0000 0000, B = 0011 1111, C = 1111 0000, D = 0010 0000

(Imagine this is random)
E = 0001 0000
No Compression
Blank
Three-Dots
Checkerboard
Rectangle
Primes
Random

Only Six Possible Pictures
Blank
Three-Dots
Checkerboard
Rectangle
Primes
Random

Pairs of Coordinates
Blank
Three-Dots
Checkerboard
Rectangle
Primes
Random
**Boolean Expressions**
Blank
Three-Dots
Checkerboard
Rectangle
Primes
Random

**Pascal Program**
Blank
Three-Dots
Checkerboard
Rectangle
Primes
Random
Huffman Code

Blank

Three-Dots

Checkerboard

Rectangle

Primes

Random
Substitution Code

Blank

Three-Dots

Checkerboard

Rectangle

Primes

Random