

ENG123 Assignment 5

1)

a) 0.83

b) 0.05

c) 0.41

d) 0.00

2)

a) 0.4116

b) $4 \times .3$

$$= 1.2$$

3)

a) A (assuming constant probability)

- binary outcomes ✓
- fixed number of trials ✓
- constant probability ✓?
- independent trial ✓

b) B (assuming time is within discrete data requirements)

- non negative ✓
- discrete data? (can be 1.762 ms)
- binary options x

c) C (unlikely mean)

4)

a) 0.224

b) 0.199

c) 0.35277

- mean is 3 for all

- poisson for all

5)

a) Geometric distribution

b) 0.3333

c) 3

d) 0.00867

e) $y=4$

6) mean = \$18750

Standard deviation = 2165

$$250 (\sqrt{2.5 \times 36})$$

$$250 \sqrt{(2.5 \times 36)}$$

$$= 2165$$