

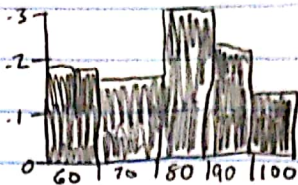
Unit 3 Answers

1 a .18/.16/.30/.22/.14

b 79.8

c 12.88

d



} Plug into calculator

2 $10 \left(\frac{4}{52}\right) + 2 \left(\frac{12}{52}\right) + 1 \left(\frac{30}{52}\right) = 1.92$

It would have to be priced at 1.92 to have expected cost of 0

3 4:1 he wins

1:4 he does not win

4

English
Trevor
 $\frac{5}{9} = \frac{91-86}{9}$

Social Studies
Lance
 $1 = \frac{89-82}{7}$

Lance scored higher because of the higher z-score

5

$\text{InvNorm}(.90, 85, 7) \rightarrow 93.97$ is needed to be top 10%

6

$76.58\% \text{ Binompdf}(10, .17, 2) + \text{Binompdf}(10, .17, 1) + \text{Binompdf}(10, .17, 0)$

7

$\text{norm cdf}(-1E99, 41, 60, 8)$

$.05208 = 2864.47$

8

$\text{InvNorm}(.9, 125, .25) = 157.038$

9

a) $\text{binompdf}(10, .23, 8) = 2.09 \times 10^{-4}$

b) $1 - \text{binomcdf}(10, .23, 8) = .927$

10

a) $\frac{-30}{10} = -3$

b) $\frac{25}{10} = 2.5$

11

$.55(9300) = 5,115$

$.15(0) = 0$

$.30(7400) = 2220$

$\frac{5115 - 2220}{2895} \rightarrow$

$\boxed{\$2895}$

12

a) .259

b) .536

c) 7.63

$\text{normcdf}(7.3, 1E99, 6.2, 1.7)$

$\text{normcdf}(5.9, 9.3, 6.2, 1.7)$

$\text{InvNorm}(.8, 6.2, 1.7)$