

# Math 206 - Quiz 8

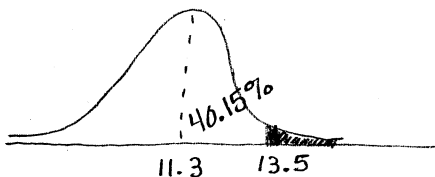
April 4, 2012

Name key

Score \_\_\_\_\_

Show all work to receive full credit. Supply explanations when necessary.

1. (2 points) In a certain region, adult female dik-diks have a mean weight of 11.3 lbs with a standard deviation of 1.7 lbs. If 456 such antelopes live in the region, about how many weigh more than 13.5 lbs?



$$z = \frac{13.5 - 11.3}{1.7} \approx 1.29$$

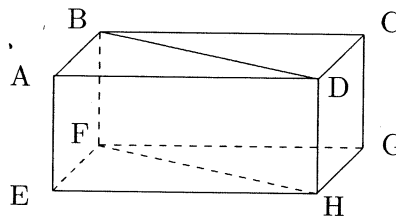
Look up 1.29 to  
GET 0.4015

$$50\% - 40.15\% = 9.85\%$$

$$9.85\% \text{ of } 456 \text{ is } \approx 44.9$$

ABOUT  
45  
DIX-DIKS

2. (3 points) Refer to the following three-dimensional figure. Identify each of the following or explain why it does not exist.



- (a) A pair of skew lines

$\overleftrightarrow{BF}$  AND  $\overleftrightarrow{EH}$

- (b) Three concurrent lines that are not coplanar

$\overleftrightarrow{AB}$ ,  $\overleftrightarrow{BD}$ ,  $\overleftrightarrow{BF}$

- (c) Three noncoplanar points

NOT POSSIBLE. ANY THREE POINTS ARE COPLANAR.

- (d) A pair of parallel lines

$\overleftrightarrow{AB}$  AND  $\overleftrightarrow{CD}$

- (e) Three noncollinear points

A, B, C

- (f) A pair of skew lines that share a common point

NOT POSSIBLE. TWO LINES THAT SHARE A POINT ARE INTERSECTING, COPLANAR LINES.