Math 2 Unit 4
NBA Data Worksheet
Day 2

Name **Key**
Date_____ Period_____

1. Find the standard deviation of the Atlantic Division.

x_i	$x_i - x$	$|(x_i - x)|$	$(x_i - x)^2$
31	$31 - 18.6 = 12.4$	12.4	153.76
22	$22 - 18.6 = 3.4$	3.4	39.30
17	$17 - 18.6 = -1.6$	1.6	2.56
13	$13 - 18.6 = -5.6$	5.6	31.36
10	$10 - 18.6 = -8.6$	8.6	73.96
SUM			300.94

$$\sigma = \sqrt{300.94}$$
$$\sigma = 17.35$$

2. Find the standard deviation of the Central Division.

x_i	$x_i - x$	$|(x_i - x)|$	$(x_i - x)^2$
28	$28 - 16.2 = 11.8$	11.8	139.24
16	$16 - 16.2 = -.2$	0.2	.04
15	$15 - 16.2 = -1.2$	1.2	1.44
14	$14 - 16.2 = -2.2$	2.2	4.84
8	$8 - 16.2 = -8.2$	8.2	67.24
SUM			212.80

$$\sigma = \sqrt{212.80}$$
$$\sigma = 14.59$$

3. Find the standard deviation of the Southeast Division?

x_i	$x_i - x$	$|(x_i - x)|$	$(x_i - x)^2$
30	$30 - 22.2 = 7.8$	7.8	60.84
28	$28 - 22.2 = 5.8$	5.8	33.64
26	$26 - 22.2 = 3.8$	3.8	14.44
15	$15 - 22.2 = -7.2$	7.2	51.84
12	$12 - 22.2 = -10.2$	10.2	104.04
SUM			264.80

$$\sigma = \sqrt{264.80}$$
$$\sigma = 16.27$$

4. Which division in the Eastern Conference is the best? <u>Use standard deviation to justify your</u> <u>answer.</u>