

**Math 1313**  
**Homework 24**  
**Section 7.2**

1. The choices for problem number 6 part a (**mean**) from the book are given below
- a. 231.857
  - b. 199.745
  - c. 211.375
  - d. 205.478
  - e. 202.875
2. Find the expected value of a random variable having the following probability distribution:

$x$	2	3	4	5	6	7	8
$P(X=x)$	0.350	0.200	0.245	0.125	0.066	0.010	0.004

- a. 2.890
  - b. 3.403
  - c. 3.205
  - d. 2.998
  - e. 3.580
3. Find the expected value of a random variable having the following probability distribution:

$x$	-5	-1	0	1	5	8
$P(X=x)$	0.12	0.16	0.28	0.22	0.12	0.1

- a. 0.473
  - b. 0.635
  - c. 0.125
  - d. 0.860
  - e. 1.024
4. Find the expected value of a random variable having the following probability distribution:

$x$	-3	-1	0	1	5
$P(X=x)$	3/10	1/5	1/14	1/7	2/7

- a. 1
- b.  $\frac{33}{70}$
- c.  $\frac{19}{35}$
- d.  $\frac{109}{140}$

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e.  $\frac{33}{140}$

5. The choices for problem number 20 from the book are given below.
- a. 3.7812
  - b. 3.1952
  - c. 2.9051
  - d. 3.0153
  - e. 2.7692
6. The choices for problem number 28 from the book are given below.
- a. 0.05
  - b. 0.10
  - c. 0.11
  - d. 0.08
  - e. 0.23
7. The choices for problem number 32 from the book are given below.
- a. 31 : 19
  - b. 19 : 31
  - c. 0.62
  - d. 62 : 1
  - e. 38 : 1
8. The choices for problem number 36 from the book are given below.
- a. 16 : 17
  - b. 19 : 31
  - c. 17 : 8
  - d. 8 : 17
  - e. 31 : 17
9. The choices for problem number 40 from the book are given below.
- a. 2.667
  - b. 0.375
  - c. 0.727
  - d. 0.273
  - e. 0.429
10. The choices for problem number 50 part b from the book are given below.
- a. 0.100
  - b. 0.111
  - c. 0.889
  - d. 0.900
  - e. 0.684