Question 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Instructions
Here are 26 questions from all the sections we've covered... I am thinking we should have 20 or so questions on this exam... Therefore, please spend Wednesday trying to find 6 questions to omit (and lets NOT choose all 6 from the sections on finance!)
Again, if you have any questions, please email me: Joshua.Patterson@tamuc.edu

1. Question Details JModd7 5.1.003. [1633641]

Find the number of days.

(a) April 1 to July 12 of the same year
[ ] 102 days

(b) April 1 through July 12 of the same year
[ ] 103 days

2. Question Details JModd7 5.1.005.CMI. [1617591]

Find the simple interest I of the given loan amount. (Round your answer to the nearest cent.)

$4,000 borrowed at 7% for three years

I = $ [ ] 840.00

3. Question Details JModd7 5.2.011.CMI. [1634219]

Consider the following investment. (Round your answers to the nearest cent.)

$3,000 at 5% compounded annually for 12 years

(a) Find the future value of the given amount.
$ [ ] 5,387.57

(b) Interpret the future value of the given amount.

After 12 years, the investment is worth $ [ ] 5,387.57 .

4. Question Details JModd7 5.2.017. [1634241]

Consider the following nominal rate. (Round your answers to two decimal places.)

7% compounded monthly

(a) Find the annual yield corresponding to the given nominal rate.
[ ] 7.23 %

(b) Interpret the annual yield corresponding to the given nominal rate.

The given compound rate is equivalent to [ ] 7.23 % simple interest.

5. Question Details JModd7 5.3.001. [1637359]

Find the future value of the given annuity. (Round your answer to the nearest cent.)

ordinary annuity, $130 monthly payment, $6\frac{3}{4}\%$ interest, one year

$ [ ] 1609.18

6. Question Details JModd7 5.4.001.CMI. [1639656]

The following loan is a simple interest amortized loan with monthly payments. (Round your answers to the nearest cent.)

$4000, $8\frac{1}{2}\%$, 4 years

(a) Find the monthly payment.
$ [ ] 98.59

(b) Find the total interest.
$ [ ] 732.47

7. Question Details JModd7 5.6.001.CMI. [1637309]

Cheryl Wilcox is planning for her retirement, so she is setting up a payout annuity with her bank. She wishes to receive a payout of $1,300 per month for twenty years.

(a) How much money must she deposit if her money earns 8% interest compounded monthly? (Round your answer to the nearest cent.)
$ [ ] 155,420.58

(b) Find the total amount that Cheryl will receive from her payout annuity.
$ [ ] 312,000

8. Question Details JModd7 4.1.002. [1634367]

To study the eating habits of students at a local college, thirty randomly selected students were surveyed to determine the number of times they had purchased food at the school cafeteria during the last week. The following results were obtained.

1 1 2 2 2 3 4 4 3 5

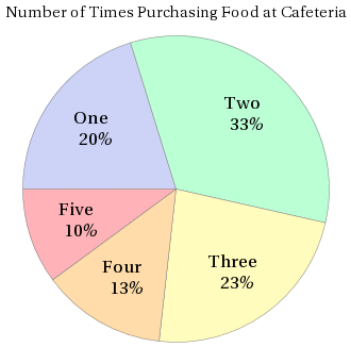
1 2 3 2 2 1 1 1 5 2

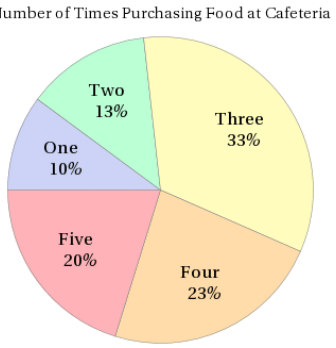
2 3 2 4 3 5 3 3 4 2

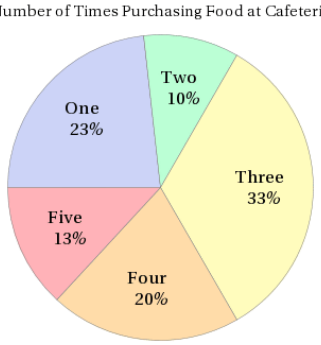
(a) Organize the given data by creating a frequency distribution.

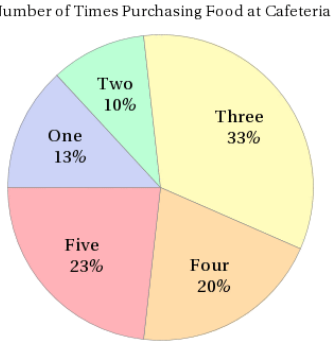
Number of Times Purchased Food	Frequency
1	6
2	10
3	7
4	4
5	3

(b) Construct a pie chart to represent the data.

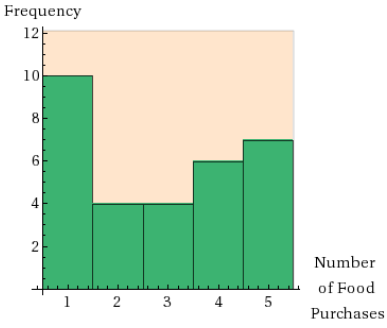


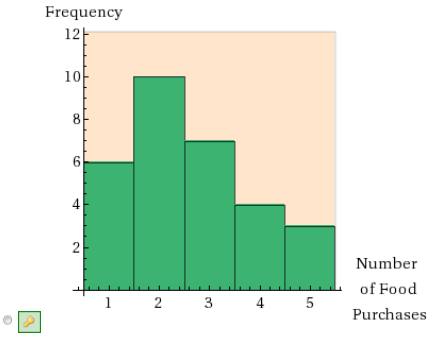


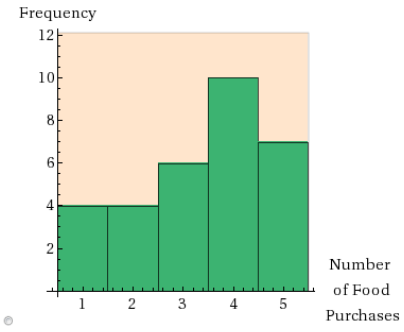




(c) Construct a histogram using single-valued classes of data.







9. Question Details JModd7 4.1.016. [1634366]

The frequency distribution shown in the following table lists the number of hours per day a randomly selected sample of teenagers spent watching television. Where possible, determine what percent of the teenagers spent the following number of hours watching television. (Round your answers to one decimal place. If not possible, enter IMPOSSIBLE.)

Hours per day	Number of Teenagers
$0 \le x < 1$	18
$1 \le x < 2$	32
$2 \le x < 3$	24
$3 \le x < 4$	38
$4 \le x < 5$	28
$5 \le x < 6$	12
$6 \le x < 7$	16

(a) less than 4 hours
[ ] 66.7 %

(b) at least 5 hours
[ ] 16.7 %

(c) at least 1 hour
[ ] 89.3 %

(d) less than 2 hours
[ ] 29.8 %

(e) at least 2 hours but less than 4 hours
[ ] 36.9 %

(f) more than 3.5 hours
[ ] IMPOSSIBLE %

10. Question Details JModd7 4.2.003. [1639583]

Find the mean, median, and mode of the given set of raw data. (If more than one mode exists, separate your answers with commas. If an answer does not exist, enter DNE.)

1.2 1.8 0.7 1.5 1.0 0.7 1.9 1.4 1.2
0.8 1.4 1.3 2.3 0.9 2.0 1.4 1.5 2.2

mean [ ] 1.4
median [ ] 1.4
mode [ ] 1.4

11. Question Details JMod7 4.3.004.CMI. [1639281]

Find the mean and sample standard deviation of each set of data. (Round the standard deviation to two decimal places.)

(a) 4 6 8 10 12 14

mean [ ] 9

standard deviation [ ] 3.74

(b) 104 106 108 110 112 114

mean [ ] 109

standard deviation [ ] 3.74

(c) How are the data in (b) related to the data in (a)?

- The data in (b) are 100 more than the data in (a).
- The data are not related.
- The data in (b) are the same as the data in (a).
- The data in (b) are 100 times the data in (a).
- The data in (a) are 100 more than the data in (b).

(d) How do your answers for (a) and (b) compare?

- The mean of the data in (a) is 100 more than the mean of the data in (b). The standard deviations are the same.
- The mean of the data in (b) is 100 more than the mean of the data in (a). The standard deviations are the same.
- The means are the same. The standard deviation of the data in (b) is 100 more than the standard deviation of the data in (a).
- Both answers for (a) are the same as the answers for (b).
- The answers are not related.

12. Question Details JMod7 4.3.007. [1639317]

Joey and Dee Dee bowled five games at the Rock 'n' Bowl Lanes. Their scores are given in the following table.

Joey	147	175	223	162	133
Dee Dee	181	165	186	140	163

(a) Find the mean score of each bowler.

Joey [ ] 168

Dee Dee [ ] 167

Who has the highest mean?

- Dee Dee
- Joey

(b) Find the standard deviation of each bowler's scores. (Round your answers to one decimal place.)

Joey [ ] 34.6

Dee Dee [ ] 18.1

(c) Who is the more consistent bowler? Why?

- Joey is more consistent because his scores have a lower standard deviation.
- Joey is more consistent because his scores have a higher mean.
- Dee Dee is more consistent because her scores have a lower standard deviation.
- Dee Dee is more consistent because her scores have a higher mean.
- Joey is more consistent because his scores have a higher standard deviation.

13. Question Details JMod7 4.4.005. [1639392]

What percent of the standard normal z-distribution lies between the following values? (Round your answers to two decimal places.)

(a) $z = 0$ and $z = 1$

[ ] 34.13 %

(b) $z = -1$ and $z = 0$

[ ] 34.13 %

(c) $z = -1$ and $z = 1$ (*Note:* This interval represents one standard deviation of the mean.)

[ ] 68.27 %

14. Question Details JModd7 4.4.013. [1639518]

Find c such that each of the following is true. (Round your answers to two decimal places.)

(a) $p(0 < z < c) = 0.1337$
$c =$ [ ] 0.34

(b) $p(c < z < 0) = 0.4826$
$c =$ [ ] -2.11

(c) $p(-c < z < c) = 0.4640$
$c =$ [ ] 0.62

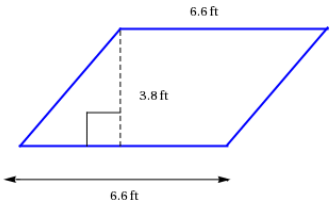
(d) $p(z > c) = 0.6059$
$c =$ [ ] -0.27

(e) $p(z > c) = 0.0541$
$c =$ [ ] 1.61

(f) $p(z < c) = 0.1024$
$c =$ [ ] -1.27

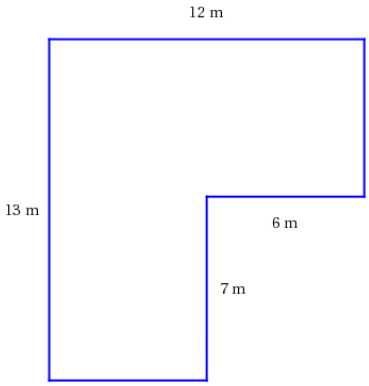
15. Question Details JModd7 8.1.005.CMI. [1639473]

Find the area of the figure. (Round your answer to one decimal place.)
[ ] 25.1 ft^2



16. Question Details JModd7 8.1.016. [1639507]

Consider the following figure.



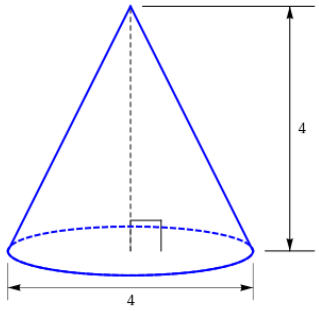
(a) Find the area of the figure.
[ ] 114 m^2

(b) Find the perimeter of the figure.
[ ] 50 m

17. Question Details JModd7 8.2.007. [1643816]

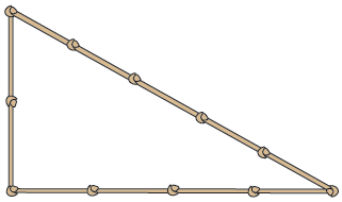
Find the volume of the figure. All dimensions are given in feet. (Round your answer to two decimal places.)

[ ] 16.76 ft^3



18. Question Details JModd7 8.3.002. [1643817]

Determine whether the configuration of knotted ropes would form a right triangle.



- Yes
- No

19. Question Details JModd7 8.3.017. [1643908]

Find the perimeter of a triangle having sides with the following measurements: 4 cubits, 5 palms, 3 fingers; 5 cubits, 4 palms, 2 fingers; 6 cubits, 3 palms, 3 fingers.

[ ] 17 cubits

20. Question Details JModd7 10.0A.001. [1666806]

Find the value of v.

$v = \log_2 8$

$v =$ [ ] 3

21. Question Details JModd7 10.0A.008. [1666825]

Find the value of u.

$\log_7 u = 1$

$u =$ [ ] 7

22. Question Details JModd7 10.0A.030. [1666764]

Use a calculator to find each value. (Round your answers to eight decimal places.)

(a) $5e^{0.08}$

[ ] 5.41643534

(b) $5(10^{0.08})$

[ ] 6.01132217

23. Question Details JModd7 10.0A.046. [1666772]

Use a calculator to find each value. (Round your answers to eight decimal places.)

(a) $\ln(e^{3.6})$

[ ] 3.6

(b) $\log(10^{3.6})$

[ ] 3.6

24. Question Details JModd7 10.0A.052. [1666846]

Use a calculator to find each value. (Round your answers to eight decimal places.)

(a) $e^{2 \ln 2}$

[ ] 4

(b) $10^{2 \log 2}$

[ ] 4

25. Question Details JModd7 10.1.003.CMI. [1672779]

A house is purchased for $140,000 in January 2004. A year later, the house next door is sold for $149,800. The two houses are of the same style and size and are in similar condition, so they should have equal value.

Use the model $v = 140e^{0.0676586485t}$, where t is the number of years after January 2004 and v is the value in thousands of dollars, to predict when the house would be worth $250,000.

The house will be worth $250,000 in ---Select--- July , [ ] 2012 .

26. Question Details JModd7 11.2.034. [1646078]

Solve the system with a graphing calculator. Check your answers by substituting them back in.

$7x - 8y = 11$
$2x + 2y = 1$

$(x, y) =$ ([ ] 1 , [ ] -1/2)

Assignment Details