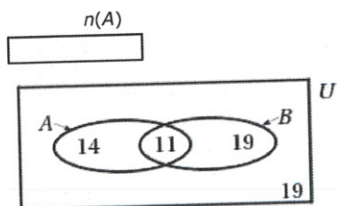


1. -/1 pointsBerrFinMath1 5.1.001.

Find the number using the following Venn diagram.



Need Help?

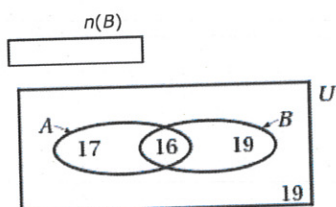
Read It

Talk to a Tutor

Show My Work (Optional) ?

2. -/1 pointsBerrFinMath1 5.1.002.

Find the number using the following Venn diagram.



Need Help?

Read It

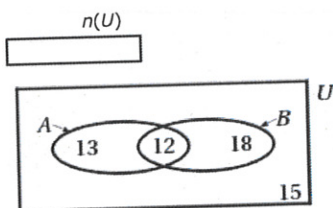
Watch It

Talk to a Tutor

Show My Work (Optional) ?

3. -/1 pointsBerrFinMath1 5.1.003.

Find the number using the following Venn diagram.



Need Help?

Read It

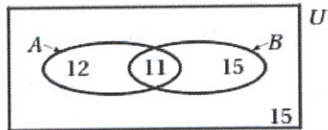
Talk to a Tutor

Show My Work (Optional) ?

4. -/1 pointsBerrFinMath1 5.1.004.

Find the number using the following Venn diagram.

$n(A \cap B)$



Need Help?

Read It

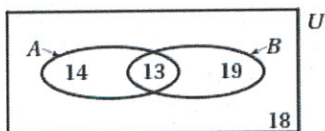
Talk to a Tutor

Show My Work (Optional) ?

5. -/1 pointsBerrFinMath1 5.1.005.

Find the number using the following Venn diagram.

$n(A \cup B)$



Need Help?

Read It

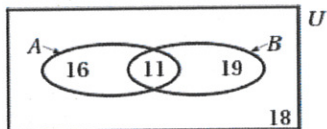
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6. -/1 pointsBerrFinMath1 5.1.006.

Find the number using the following Venn diagram.

$n(A^c)$



Need Help?

Read It

Watch It

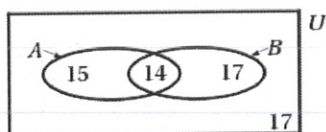
Talk to a Tutor

Show My Work (Optional) ?

7. -/1 pointsBerrFinMath1 5.1.008.

Find the number using the following Venn diagram.

$n(A \cap B^c)$



Need Help?

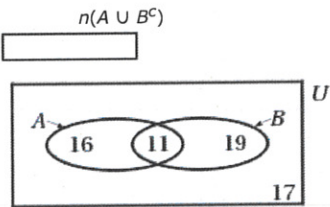
Read It

Talk to a Tutor

Show My Work (Optional) ?

8. -/1 pointsBerrFinMath1 5.1.010.

Find the number using the following Venn diagram.

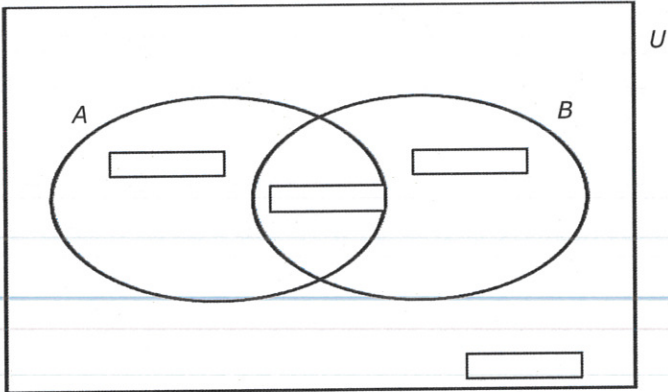


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9. -/4 pointsBerrFinMath1 5.1.011.

Given that $n(A) = 22$, $n(B) = 12$, $n(A \cap B) = 8$, and $n(U) = 38$, fill in the four regions in the Venn diagram.



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Show My Work (Optional) [?](#)

10. -/1 pointsBerrFinMath1 5.1.012.

A parking permit sticker displays an identification code consisting of a letter (from A and B) followed by a digit (from 1 and 2). How many different permits can be issued?

permits

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Show My Work (Optional) [?](#)

11. -/1 pointsBerrFinMath1 5.1.014.

How many seven-symbol computer passwords can be formed using the letters A to J and the digits 3 to 6?

passwords

Need Help? [Read It](#) [Talk to a Tutor](#)

Show My Work (Optional) [?](#)

12. -/2 pointsBerrFinMath1 5.2.001.

Calculate each factorial.

(a) $2!$ (b) $6!$

Need Help?

Read It

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Talk to a Tutor

Show My Work (Optional) ?

13. -/1 pointsBerrFinMath1 5.2.002.

Calculate the quotient of factorials.

$$\frac{9!}{7!}$$

Need Help?

Read It

Talk to a Tutor

Show My Work (Optional) ?

14. -/1 pointsBerrFinMath1 5.2.003.

Determine the number of permutations.

$7P_4$

Need Help?

Read It

Watch It

Talk to a Tutor

Show My Work (Optional) ?

15. -/1 pointsBerrFinMath1 5.2.005.

Find the number of combinations.

$6C_4$

Need Help?

Read It

Watch It

Talk to a Tutor

Show My Work (Optional) ?

16. -/1 pointsBerrFinMath1 5.2.006.

Find the number of combinations.

$9C_3$

Need Help?

Read It

Talk to a Tutor

Show My Work (Optional) ?

17. -/2 points BerrFinMath1 5.2.008.

A computer password is to consist of **five** alphanumeric characters with no repeats. (An alphanumeric character is a letter from A to Z or a digit from 0 to 9.)

How many such passwords are there?

 passwords

How many are there if the letter O and the digit 0 are excluded to avoid confusion?

 passwords

Need Help?

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Show My Work (Optional) ?

18. -/1 points BerrFinMath1 5.2.010.

A junior high girls' basketball team is to consist of 5 players. How many different teams can the manager select from a roster of **10** girls?

 teams

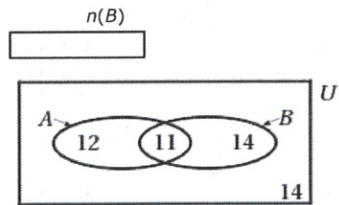
Need Help?

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Show My Work (Optional) ?

1. -/1 pointsBerrFinMath1 5.1.002.

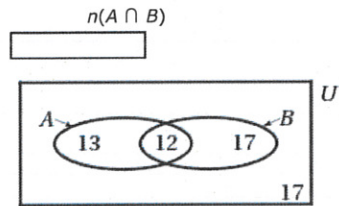
Find the number using the following Venn diagram.



Show My Work (Optional) ?

2. -/1 pointsBerrFinMath1 5.1.004.

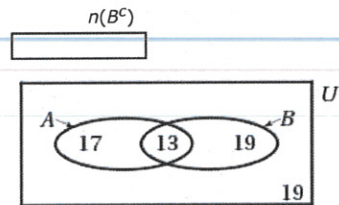
Find the number using the following Venn diagram.



Show My Work (Optional) ?

3. -/1 pointsBerrFinMath1 5.1.007.

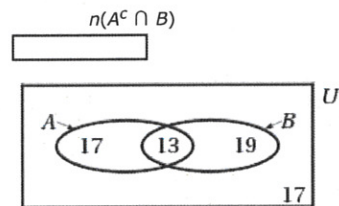
Find the number using the following Venn diagram.



Show My Work (Optional) ?

4. -/1 pointsBerrFinMath1 5.1.009.

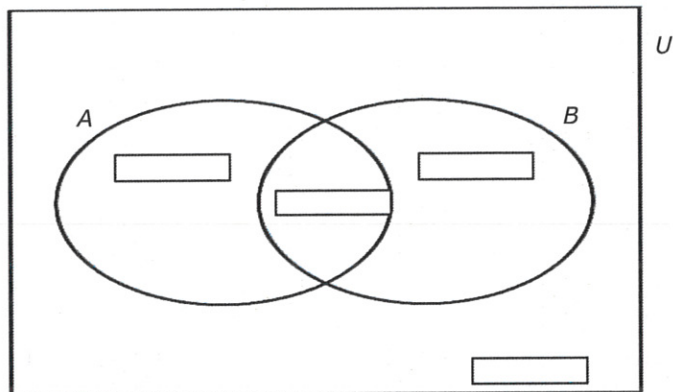
Find the number using the following Venn diagram.



Show My Work (Optional) ?

5. -/4 pointsBerrFinMath1 5.1.011.

Given that $n(A) = 22$, $n(B) = 12$, $n(A \cap B) = 6$, and $n(U) = 40$, fill in the four regions in the Venn diagram.



Show My Work (Optional) ?

6. -/1 pointsBerrFinMath1 5.1.013.

The sophomore lacrosse team has 27 players, of whom 10 played defense last year, 15 played offense, and 3 played both defense and offense, while the rest of the players did not play last year. How many members of the team played last year?

 players

Show My Work (Optional) ?

7. -/1 pointsBerrFinMath1 5.1.015.

A witness in a trial testified that he searched 19 cars, of which 12 were convertibles, 14 had out-of-state plates, and 4 were convertibles with out-of-state plates. Explain why the witness was not telling the truth.

- ☐ The actual number of cars he searched was 26, which does not agree with the witness' testimony that he searched 19 cars.
- ☐ The actual number of convertibles would have to be 8, which does not agree with the witness' testimony that 12 cars were convertibles.
- ☐ The actual number of cars he searched was 22, which does not agree with the witness' testimony that he searched 19 cars.
- ☐ The actual number of convertibles with out-of-state plates would have to be 12, which does not agree with the witness' testimony that 4 convertibles had out-of-state plates.

Show My Work (Optional) ?

8. -/2 pointsBerrFinMath1 5.2.001.

Calculate each factorial.

(a) $2!$

(b) $3!$

Show My Work (Optional) ?

9. -/1 pointsBerrFinMath1 5.2.002.

Calculate the quotient of factorials.

$$\frac{9!}{7!}$$

Show My Work (Optional) ?

10. -/1 points BerrFinMath1 5.2.003.

Determine the number of permutations.

$6P_4$

Show My Work (Optional) ?

11. -/1 points BerrFinMath1 5.2.005.

Find the number of combinations.

$6C_3$

Show My Work (Optional) ?

12. -/1 points BerrFinMath1 5.2.007.

A telephone number consists of seven digits, and the first digit cannot be a zero or a one. How many telephone numbers have no repeated digits?

telephone numbers

Show My Work (Optional) ?

13. -/1 points BerrFinMath1 5.2.009.

You have 2 science books, 3 language books, and 5 philosophy books. In how many ways can they be arranged on the shelf if all books of the same subject are to be together?

ways

Show My Work (Optional) ?