**Course: Geometry**

**Topic: Semester A Exam Review: Part 1**

**Subtopic:**

**Document: LIVE Stream 1**

**Reference Number: 2049-4**

*https://youtube.com/c/MrMattTheTutor*

A picture containing sitting, sign, monitor, screen

Description automatically generated

1. Determine the length of the missing line segment:
   1. Line segment AC consists of line segments AB and BC. If AC is 10 and BC is 4, what is the length of AB?
   2. Line segment AC consists of line segments AB and BC. If AB is 10 and BC is 4, what is the length of AC?
2. Find the midpoint between the following points:
   1. (3,5) and (7,5)
   2. (2,4) and (6,10)
3. Find the distance between the following points:
   1. (1,2) and (5,8)
   2. (3,1) and (9,5)
4. Calculate the area of the following shapes:
   1. A rectangle with vertices of A(3,5), B(3,10), C(15,10), and D(15,5)
   2. A triangle with vertices of A(4,2), B(5,8), and C(8,2)
   3. A square with vertices of A(2,4), B(8,4), C(8,10), and D(2,10)
5. Determine the length of the missing line segment:
   1. Line segment DF consists of line segments DE and EF. If DE is 6 and DF is 14, what is the length of EF?
   2. Line segment DF consists of line segments DE and EF. If DE is 12 and EF is 8, what is the length of AB?
6. Find the midpoint between the following points:
   1. (5,6) and (13,12)
   2. (-9,11) and (7,15)
7. Find the distance between the following points:
   1. (8,3) and (-6,9)
   2. (4,-6) and (-12,8)