

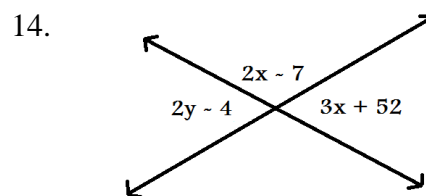
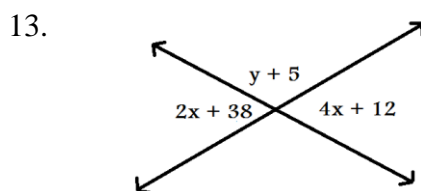
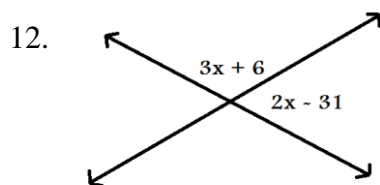
## Geometry Chapter 1 Review For Exams

### Main topics that you should understand.

- Segment Addition Postulate
- Angle Addition Postulate
- Segment Bisectors
- Angle Bisectors
- Linear Pairs
- Vertical Angles
- Complementary & Supplementary Angles
- Distance Formula
- Midpoint Formula

1. Given that A is between B and C, find AB if  $AC = 15$  and  $BC = 22.5$ .
2. Given that C is between D and E, solve for x if  $CD = 2x + 3$ ,  $DE = 39$ , and  $CE = x - 12$ .
3. Given that E is between A and B, find AB if  $AE = 2x + 6$ ,  $EB = 14$ , and  $AB = x + 35$ .
4. Given that B is in the interior of  $\angle CAD$ , find  $m\angle CAB$  if the  $m\angle CAD = 48$  and  $m\angle BAD = 22$ .
5. Given that E is in the interior of  $\angle BAD$ , solve for x if the  $m\angle BAE = 2x + 6$ ,  $m\angle EAD = 3x + 24$ , and  $m\angle BAD = 95$ .
6. Given that F is in the interior of  $\angle CAB$ , find the  $m\angle CAF$  if the  $m\angle CAB = x + 42$ ,  $m\angle FAB = 12$ , and the  $m\angle CAF = 2x - 6$ .
7. Given that  $\overline{AB}$  bisects  $\overline{CD}$  at E, find CE if  $AB = 12$  and  $CD = 14$ .
8. Given that  $\overline{CD}$  bisects  $\overline{AB}$  at F, solve for x if  $AB = 2x + 6$  and  $AF = 12$ .
9. Given that  $\overrightarrow{AB}$  bisects  $\angle CAD$ . Find the  $m\angle CAB$  if the  $m\angle CAD = 98$ .
10. Given that  $\overrightarrow{DE}$  bisects  $\angle ADC$ , solve for x given that  $m\angle ADE = 2x + 15$ , and  $m\angle EDC = 57$ .
11. Given that  $\overrightarrow{CD}$  bisects  $\angle ACE$ , Find the  $m\angle ACD$  if the  $m\angle ACE = x + 48$  and  $m\angle ECD = x - 6$ .

### Solve for x (ignore y).



### Find the midpoint and distance of the given points.

15. A(3, -4) B(5, -6)
16. A(-4, 5, 8) B(6, -1, 2)