

1. Triangle ABC has vertices A (-5,2), B (1,6) C (7,-4). Find

- a. the perimeter of ABC
- b. the slope of each side of ABC
- c. the slope of the altitude to each side of ABC
- d. the midpoint of each side of ABC

2..Triangle ABC has vertices A(-2,2) B (6,8) and C (4,-1). Find

- a. the equation of AC
- b. the length of AC.
- c. the length of the median to AB
- d. the equation of the altitude to AC.

## Answers to Ch 13 worksheet

1.

a.  $2\sqrt{13} + 2\sqrt{34} + 6\sqrt{5}$

b.  $\frac{2}{3}, \dots, \frac{-5}{3}, \dots, \frac{-1}{2}$

c.  $\frac{-3}{2}, \dots, \frac{3}{5}, \dots, 2$

d.  $(-2, 4), (4, 1) (1, -1)$

e. 7

2.

a.  $y = \frac{-1}{2}x + 1$

b.  $3\sqrt{5}$

c.  $(4, -1), (2, 5) = 2\sqrt{10}$

d.  $y = 2x - 4$