

## Analytic Geometry Practice Answers

1. length AD = 7.07

length AB = 8.49

length DC = 14.14

Area Trapezoid = 80 square metres

Cost/sq metre = \$59.95/sq. m.

2. Intersection point of Laurier and Ch. des Soeurs is at (8, 5.8)

Slope of Laurier is  $-6/5$  --> Slope of Ch. des Soeurs is  $5/6$

Rule of Ch. des Soeurs is  $y = 5/6 x - 0.87$

Intersection point of Ch. des Soeurs and Cartier is (15, 11.63)

Distance from start to (8, 5.8) is 9.68 units, distance from (8, 5.8) to (15, 11.63) is 9.11

Total distance is 18.79 units.

3. E is  $1/4$  of the distance from (4, 36) to (20, 12) therefore it is at (8, 30)...

NOTICE the pattern!!

all points going from (4, 36) to (20, 12) --> x-values go up by 4, y-values go down by 6

from point (44, 28) will be the opposite --> x-values go down by 4, y-values go up by 6

E(8, 30)

F(12, 24)

G(16, 18)

B(32, 46)

C(36, 40)

D(40, 34)

### Review...

1.  $M(4, 6.5)$
2.  $y = -1/3 x + 38/3$
3.  $y = -1/2 x - 2$
4.  $y = -1/4 x$
5. 7.28 units
6.  $(-17.5, 37)$
7.  $(-9, -6.8)$
8. Intersection point is  $(-6, 3.6)$   
distance is 23.68 units
9. Midpoint AB is  $(1, 6)$  Distance is 39 units
10. Perimeter is 26.40 units

### Point of Division Practice

1. Point B is at  $(8, 18.4)$   
Distance CD is 21 km  
Distance DB is 20.79 km  
Distance AB is 10.4 km  
Sabrina rode a total of 52.19 km
2. Point B is located at  $(150, 340)$   
Distance AB is 107.70 km  
Distance BD is 240 km  
Paul drove 347.70 km