

# Vectors Answer Key

Increasingly  
Difficult  
Exercises

a)  $\overrightarrow{AC} = a + b$

b)  $\overrightarrow{AF} = -b$   
 $\overrightarrow{AG} = a - b$   
 $\overrightarrow{FD} = 2a - b$

c)  $\overrightarrow{AM} = \frac{1}{2}(2a + 3b)$   
 $\overrightarrow{BM} = 1.5b - a$

d)  $\overrightarrow{AP} = \frac{3}{8}(5b - 3a)$   
 $\overrightarrow{BP} = \frac{15}{8}(a + b)$

e)  $\overrightarrow{AD} = 3a - 3b$   
 $\overrightarrow{AD} = 1.5(2a - 2b)$   
 $\overrightarrow{AD} = 1.5\overrightarrow{BC}$

f)  $\overrightarrow{ED} = 6a + 8b$   
 $\overrightarrow{DF} = 6a + 8b$   
 $\overrightarrow{ED}$  and  $\overrightarrow{DF}$  are parallel  
and share a common  
point, D.

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