

8.3

$$1) \overrightarrow{AB} = \begin{pmatrix} 8 - 0 \\ -1 - 4 \end{pmatrix} = \begin{pmatrix} 8 \\ -5 \end{pmatrix}$$

$$2) \overrightarrow{BA} = \begin{pmatrix} 0 - 8 \\ 4 - (-1) \end{pmatrix} = \begin{pmatrix} -8 \\ 5 \end{pmatrix}$$

$$3) \overrightarrow{AC} = \begin{pmatrix} -5 - 0 \\ -4 - 4 \end{pmatrix} = \begin{pmatrix} -5 \\ -8 \end{pmatrix}$$

$$4) \overrightarrow{DB} = \begin{pmatrix} 8 - (-6) \\ -1 - 0 \end{pmatrix} = \begin{pmatrix} 14 \\ -1 \end{pmatrix}$$

$$5) \overrightarrow{EC} = \begin{pmatrix} -5 - \frac{1}{2} \\ -4 - (-\frac{2}{3}) \end{pmatrix} = \begin{pmatrix} -\frac{11}{2} \\ -\frac{10}{3} \end{pmatrix} = -\frac{1}{6} \begin{pmatrix} 33 \\ 20 \end{pmatrix}$$

$$6) \overrightarrow{DA} = \begin{pmatrix} 0 - (-6) \\ 4 - 0 \end{pmatrix} = \begin{pmatrix} 6 \\ 4 \end{pmatrix}$$

$$7) \overrightarrow{ED} = \begin{pmatrix} -6 - \frac{1}{2} \\ 0 - (-\frac{2}{3}) \end{pmatrix} = \begin{pmatrix} -\frac{13}{2} \\ \frac{2}{3} \end{pmatrix} = \frac{1}{6} \begin{pmatrix} -39 \\ 4 \end{pmatrix}$$