Accel. Precalculus Name_____

Vectors: Component Form & Magnitude

Date_____ Period____

Find the following information for each vector: Component form, magnitude.

1) $\overrightarrow{PQ}$ where $P = (-6, -2)$ $Q = (3, -10)$

2) $\overrightarrow{AB}$ where $A = (-10, -9)$ $B = (-4, 9)$

3) $\overrightarrow{CD}$ where $C = (-5, 4)$ $D = (5, -8)$

4) $\overrightarrow{RS}$ where $R = (3, 8)$ $S = (5, 8)$

5) $\overrightarrow{RS}$ where $R = (6, -2)$ $S = (9, 2)$

6) $\overrightarrow{PQ}$ where $P = (-4, -5)$ $Q = (4, -6)$

7) $\overrightarrow{RS}$ where $R = (-4, 8)$ $S = (-5, -6)$

Answers to Vectors: Component Form & Magnitude

1) $\langle 9, -8 \rangle$
$\sqrt{145} \approx 12.042$

2) $\langle 6, 18 \rangle$
$6\sqrt{10} \approx 18.974$

3) $\langle 10, -12 \rangle$
$2\sqrt{61} \approx 15.62$

4) $\langle 2, 0 \rangle$
2

5) $\langle 3, 4 \rangle$
5

6) $\langle 8, -1 \rangle$
$\sqrt{65} \approx 8.062$

7) $\langle -1, -14 \rangle$
$\sqrt{197} \approx 14.036$