Parallel and Perpendicular Lines

1) A line *m* passes through (−2, −7) and (1, s). Slope of a line *n* is −1. Line *m* is perpendicular to line *n*. Find the value of s.

   s = _____

2) A line passes through (t, −3) and (−3, −6). Another line passes through (−5, −6) and (−2, −9). The lines are parallel. Find the value of t.

   t = _____

3) A line *u* passes thr[...] h (−2, 6) and (1, 9). The lines *u* and *v* a[...]

   b = _____

4) $\overleftrightarrow{AB}$ passes throug[...] nd (9, 5). If $\overleftrightarrow{AB} \perp \overleftrightarrow{CD}$, find the value of k[...]

   k = _____

5) A line passes through U(3, 9) and V(6, 6). Another line passes through W(y, 6) and X(5, 8). The lines are parallel. Find the value of y.

   y = _____