Lesson 3.5 Practice: Slopes of Parallel and Perpendicular Lines

School Launch · Geometry · Unit 3: Parallel and Perpendicular Lines · Worksheet A

Calculator allowed

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Line 1 passes through $(4, 1)$ and $(3, 6)$; line 2 through $(5, 4)$ and $(6, -1)$. Are the lines parallel, perpendicular or neither? EASY

2. Line 1 passes through $(5, -2)$ and $(0, 3)$; line 2 through $(2, 2)$ and $(-3, -3)$. Are the lines parallel, perpendicular or neither? EASY

3. Line 1 passes through $(-1, 5)$ and $(6, 1)$; line 2 through $(5, 0)$ and $(9, 7)$. Are the lines parallel, perpendicular or neither? EASY

4. Line 1 passes through $(-1, -6)$ and $(-5, 0)$; line 2 through $(4, 5)$ and $(8, -1)$. Are the lines parallel, perpendicular or neither? MEDIUM

5. Line 1 passes through $(1, 1)$ and $(-4, -5)$; line 2 through $(0, -1)$ and $(-10, -13)$. Are the lines parallel, perpendicular or neither? MEDIUM

6. Line 1 passes through $(-1, -1)$ and $(-6, -4)$; line 2 through $(-5, -5)$ and $(0, -2)$. Are the lines parallel, perpendicular or neither? MEDIUM

7. Line 1 passes through $(0, -3)$ and $(2, -4)$; line 2 through $(2, 3)$ and $(3, 5)$. Are the lines parallel, perpendicular or neither? MEDIUM

8. Line 1 passes through $(0, 5)$ and $(6, -5)$; line 2 through $(-2, 0)$ and $(8, 6)$. Are the lines parallel, perpendicular or neither? HARD

9. Line 1 passes through $(-5, 3)$ and $(-1, 3)$; line 2 through $(5, -6)$ and $(13, -6)$. Are the lines parallel, perpendicular or neither? HARD

10. Line 1 passes through $(0, -5)$ and $(3, -3)$; line 2 through $(6, -2)$ and $(4, 1)$. Are the lines parallel, perpendicular or neither? HARD