Parallel

$\parallel$
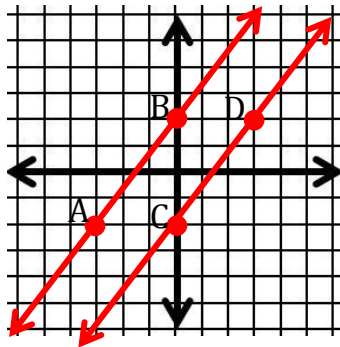
Perpendicular

$\perp$

Parallel

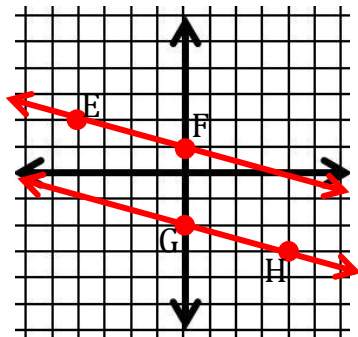$\parallel$

Perpendicular

$\perp$

$\overleftrightarrow{AB}$ _____

$\overleftrightarrow{CD}$ _____

$\overleftrightarrow{EF}$ _____

$\overleftrightarrow{GH}$ _____

$\overleftrightarrow{AB}$ _____

$\overleftrightarrow{CD}$ _____

$\overleftrightarrow{EF}$ _____

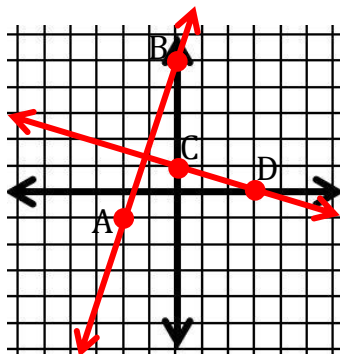$\overleftrightarrow{GH}$ _____

$\overleftrightarrow{AB}$ _____
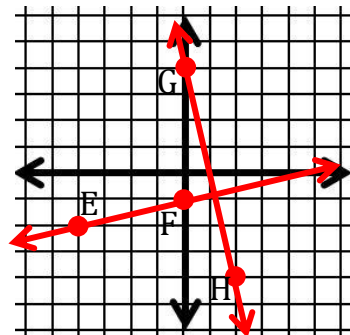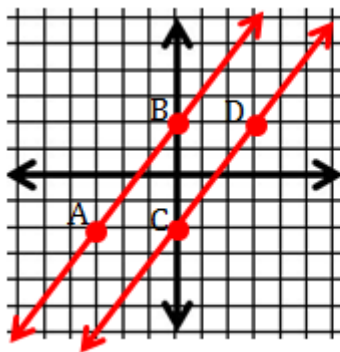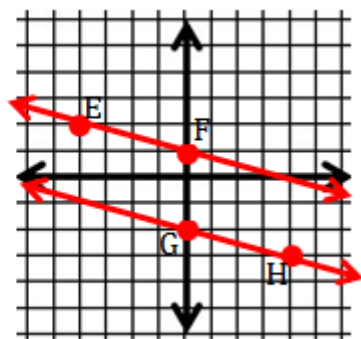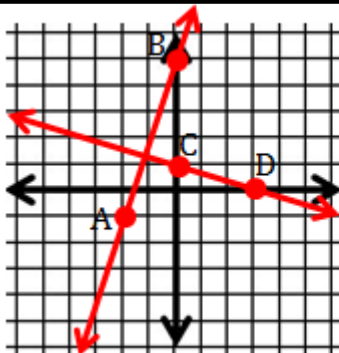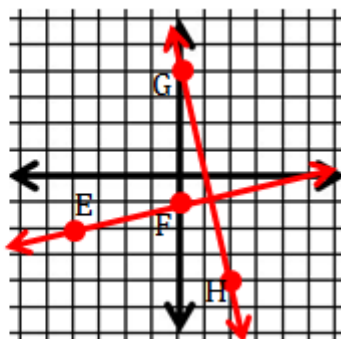
$\overleftrightarrow{CD}$ _____

$\overleftrightarrow{EF}$ _____

$\overleftrightarrow{GH}$ _____

$\overleftrightarrow{AB}$ _____

$\overleftrightarrow{CD}$ _____

$\overleftrightarrow{EF}$ _____

$\overleftrightarrow{GH}$ _____

Parallel

||

Perpendicular
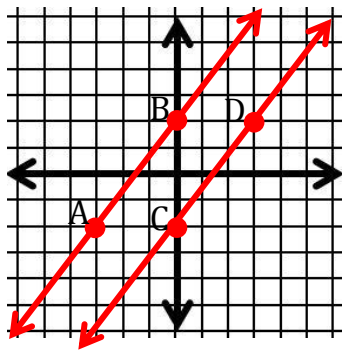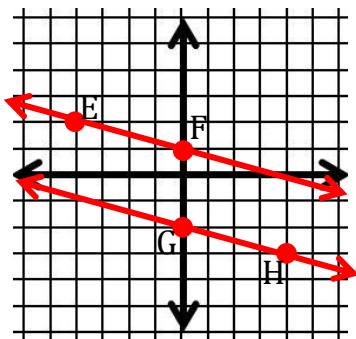
⊥

Parallel

||

Perpendicular

⊥

$\overleftrightarrow{AB}$ $y = \frac{4}{3}x + 2$

$\overleftrightarrow{CD}$ $y = \frac{4}{3}x - 2$

$\overleftrightarrow{EF}$ $y = \frac{-1}{4}x + 1$

$\overleftrightarrow{GH}$ $y = \frac{-1}{4}x - 2$

*If two lines in the same plane have the same slope, then they are parallel.

*If two lines in the same plane are parallel, then they have the same slope.

SAME SLOPE ➔ PARALLEL

$\overleftrightarrow{AB}$ $y = 3x + 5$

$\overleftrightarrow{CD}$ $y = \frac{-1}{3}x + 1$

$\overleftrightarrow{EF}$ $y = \frac{1}{4}x - 1$

$\overleftrightarrow{GH}$ $y = -4x + 4$

*If two lines in the same plane have slopes that are negative reciprocals, then they are perpendicular.

*If two lines are perpendicular, then their slopes are negative reciprocals.

NEGATIVE RECIPROCAL SLOPES ➔ PERPENDICULAR

$\overleftrightarrow{AB}$ $y = \frac{4}{3}x + 2$

$\overleftrightarrow{CD}$ $y = \frac{4}{3}x - 2$

$\overleftrightarrow{EF}$ $y = \frac{-1}{4}x + 1$

$\overleftrightarrow{GH}$ $y = \frac{-1}{4}x - 2$

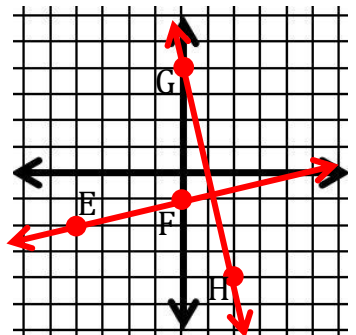*If two lines in the same plane have the same slope, then they are parallel.

*If two lines in the same plane are parallel, then they have the same slope.

SAME SLOPE ➔ PARALLEL

$\overleftrightarrow{AB}$ $y = 3x + 5$

$\overleftrightarrow{CD}$ $y = \frac{-1}{3}x + 1$

$\overleftrightarrow{EF}$ $y = \frac{1}{4}x - 1$

$\overleftrightarrow{GH}$ $y = -4x + 4$

*If two lines in the same plane have slopes that are negative reciprocals, then they are perpendicular.
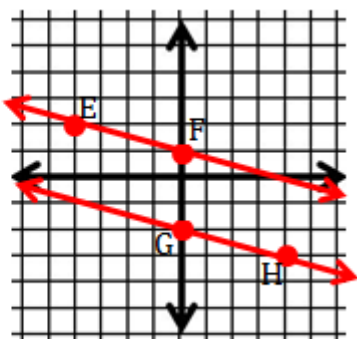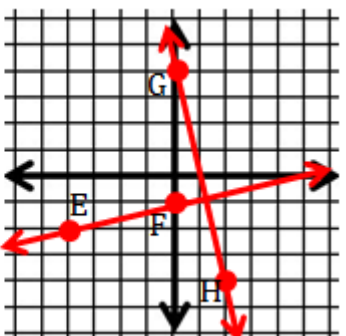
*If two lines are perpendicular, then their slopes are negative reciprocals.

NEGATIVE RECIPROCAL SLOPES ➔ PERPENDICULAR

Parallel
||

Perpendicular
⊥

Perpendicular
⊥

· If two nonvertical lines in the same plane have the same slope, then they are parallel.

· If two nonvertical lines in the same plane are parallel, then they have the same slope.

$y = \frac{3}{4}x + 2$

$y = \frac{3}{4}x - 2$

$y = -\frac{1}{4}x + 1$

$y = \frac{1}{4}x - 2$