
$\$ 100$ $\$ 100 \quad \$ 100$ $\$ 2000 \$ 200$ $\$ 300 \quad \$ 300$
$\$ 300$
$\$ 3300 \quad \$ 300$
$\$ 400$
$\$ 500$
$\$ 500$
$\$ 500$
$\$ 500$
$\$ 500$

## Parallel Lines \&

 Perpendicular Lines
# What's your type? 

## Transverse It

## Slope \& Intercept

# Terms to Know 

|  <br> Perpendicular | What's your <br> type? | Transverse It |  <br> Intercept | Terms to <br> Know |
| :---: | :---: | :---: | :---: | :---: |
| $\underline{\$ 100}$ | $\underline{\$ 100}$ | $\underline{\$ 100}$ | $\underline{\$ 100}$ | $\underline{\$ 100}$ |
| $\underline{\$ 200}$ | $\underline{\$ 200}$ | $\underline{\$ 200}$ | $\underline{\$ 200}$ | $\underline{\$ 200}$ |
| $\underline{\$ 300}$ | $\underline{\$ 300}$ | $\underline{\$ 300}$ | $\underline{\$ 300}$ | $\underline{\$ 300}$ |
| $\underline{\$ 400}$ | $\underline{\$ 400}$ | $\underline{\$ 400}$ | $\underline{\$ 400}$ | $\underline{\$ 400}$ |
| $\underline{\$ 500}$ | $\underline{\$ 500}$ | $\underline{\$ 500}$ | $\underline{\$ 500}$ | $\underline{\$ 500}$ |

## Find the equation of the ling in the

 graph below

The equation of the line that is perpendicular to the y -axis and passes through the point ( $5, \mathbf{- 1 0}$ )

The equation of the line that is
parallel to $3 \mathrm{y}-6 \mathrm{x}=20$ and passes through the point ( $-4,5$ )

The equation of the line that is perpendicular to $\mathrm{y}=-5 \mathrm{x}-9$ and passes through the point

$$
(20,-3)
$$

Find the equation of the line that is the perpendicular bisector to the segment with endpoints ( 3,7 ) and
$(5,11) ?$



## The conditional statement to prove that <br> $$
<5 \cong<7
$$




## Given: a || b

The conditional statement to prove that
$<4 \cong<8$
$\square$


## Given: a || b

The conditional statement to prove that
$<2 \cong<8$
$\square$

## CATEGORY 2 - \$400



# Given: $<3 \cong<5$ The conditional statement to prove that 

 a || b
## CATEGORY 2 - \$500



# Given: $<2 \cong<7$ The conditional statement to prove that 

 a || b
## CATEGORY 3 - \$100



## $\mathbf{m} \angle 5$ if $\mathbf{a} \| \mathbf{b}$ and $\mathrm{m} \angle 1=95$.



## CATEGORY 3 - \$200



## $\mathrm{m} \angle 4$ if $\mathrm{m} \angle 5=113$, and $\mathbf{a} \| \mathrm{b}$.



## CATEGORY 3 - \$300



## $\mathrm{m} \angle 7$ if $\mathrm{m} \angle 2=87$, and $\mathbf{a} \| \mathrm{b}$.



## CATEGORY 3 - \$400



## $\mathrm{m} \angle 5$ if $\mathbf{a} \| \mathrm{b}$, the $m \angle 4=2 x+3$ \& the $m \angle 5=3 x-8$.

## CATEGORY 3 - \$500



## The value of x so that $\mathbf{a} \| b$, if $m \angle 2=5 x+10 \quad \&$ $m \angle 6=6 x-4$.

# The formula for finding the slope of a line between two points. 

# The slope of the line containing the points $(-3,2)$ and (4, 1). 

## Of parallel, perpendicular,

or neither, what $\overleftrightarrow{\mathrm{AB}} \& \overleftrightarrow{\mathrm{CD}}$ are,
Given the following coordinates of A , B, C, \& D.
A $(1,5) \quad B(3,-2) \quad C(4,3) \quad D(11,5)$

## The slope \& y-intercept of the equation: $3 x-2 y=18$

# The slope of the line that is perpendicular to $4 x-7 y=2$ 



The steepness of a line.


# In comparison to the slope of a given line, the slope of a line that is perpendicular is 

# The measures of consecutive or same-side interior angles are this. 



## The slopes of two lines, if the lines are parallel.



# Given a segment with two defined endpoints, the 2 

 requirements needed in order to find the equation of the line that is the perpendicular bisector of the given segment.What is $y=-1 / 4 x-1$ ?


## CATEGORY 1 - \$200

## What is $\mathrm{y}=-10$ ?

## CATEGORY 1 - \$300

What is $\mathrm{y}=3 \mathrm{x}+17$ ?


## CATEGORY 1 - \$400

What $\mathrm{y}=1 / 5 \mathrm{x}-7$ ?


## CATEGORY 1 - \$500

What is $\mathrm{y}=-1 / 2 \mathrm{x}+11$ ?


## CATEGORY 2 - \$100

## What is if two lines intersect then vertical angles are congruent?



What is if a transversal intersects two parallel lines, then corresponding angles are congruent


## CATEGORY 2 - \$300

What is if a transversal intersects two parallel lines, then alternate exterior angles are congruent


## CATEGORY 2 - \$400

What is if two lines and a transversal form alternate interior angles that are congruent then the two lines are parallel?

# What is if two lines and a transversal form same side exterior angles that are supplementary, then the two lines are parallel? 



CATEGORY 3 - \$100

What is 95 ?


## CATEGORY 3 - \$200

## What is 67 ?



CATEGORY 3 - \$300

What is 93 ?


CATEGORY 3 - \$400

## What is 103 ?



CATEGORY 3 - \$500

## What is $14 ?$



## CATEGORY 4 - \$100

## What is $\mathrm{m}=\frac{\mathrm{y}_{2}-y_{1}}{x_{2}-x_{1}}$ ? <br> $$
x_{2}-x_{1}
$$

## CATEGORY 4 - \$200

## What is $-1 / 7$ ?

CATEGORY 4 - \$300

## What is perpendicular?

## CATEGORY 4 - \$400

## What is $\mathrm{m}=3 / 2$ and $\mathrm{b}=-9$ ?

CATEGORY 4 - \$500

What is $-7 / 4$ ?


CATEGORY 5 - $\$ 100$

What is slope?


## CATEGORY 5 - \$200

What is the negative reciprocal to the slope of the given line?


## CATEGORY 5 - \$300

## What is supplementary?

CATEGORY 5 - \$400

## What is the same?

## CATEGORY 5 - \$500

What is the midpoint and the negative reciprocal of the slope for the given segment


# Final Category: <br> A Matter of <br> Steepness 

# The slope of any line perpendicular to the line $\mathrm{y}=3$. 

## FINAL CATEGORY

## What is undefined?

# END OF GAME 

Daily Doubles and usage notes follow...

## $D A \| y$



## $D A \| y$





