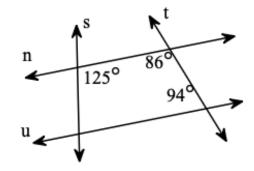
# 

Answers to the difficult/tricky ones

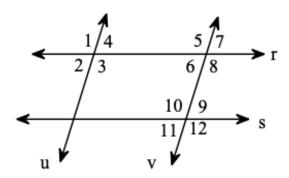
## Quiz #5, 6

In the given figure, which lines, if any, are parallel? Justify your answer.

Jestion Viewer



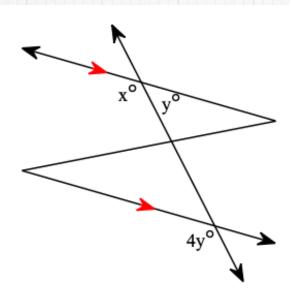
Use the given information to Question Viewer which lines, if any, are parallel. Justify each conclusion with a theorem.



# Quiz # 16

Find the values of the variables.

Question Viewer



Determine whether the following lines are parallel, perpendicular, or neither.

$$y = -9x + 4$$
$$y = 9x + 6$$

Determine whether the pair of lines is parallel, perpendicular, or neither.

$$-4x + 2y = 5$$
$$2x - y = 6$$

The yearly cost of tuition and required fees for attending a public four-year college full time can be estimated by the linear function y = 291.2x + 2944.01 where x is the number of years after 2000 and y is the total cost.

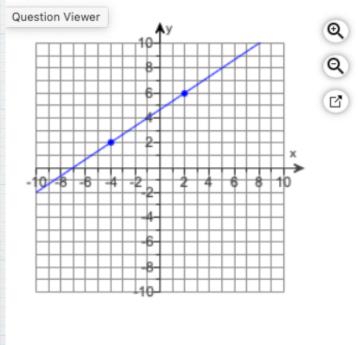
- (a) Find and interpret the slope of this equation.
- **(b)** Find and interpret the y-intercept point of this equation.

Find the slope of a line perpendicular to the following line.

$$f(x) = -\frac{9}{8}x - 5$$

#### 3.7 #9

Find an equation of the line graphed. Write the equation in standard form.



#### 3.7 #17

A fruit company recently released a new applesauce. By the end of its first year, profits on this product amounted to \$27,800. The anticipated profit for the end of the fourth year is \$56,900. The ratio of change in time to change in profit is constant. Let x be years and y be profit.

- a. Write a linear equation y that expresses profit in terms of x.
- **b.** Use this equation to predict the company's profit at the end of the seventh year.
- c. Predict when the profit should reach \$192,700.

 $\overline{\phantom{a}}$ 

a. A linear equation y that expresses profit in terms of x is y =

Let's use your SLOPE program and some Graphing / Table features of your TI-84

### 3.7 #20

Find an equation of the perpendicular bisector of the line segment whose endpoints are given.

$$(7,0)$$
 and  $(-17,-8)$ 

•••

The equation is .

(Simplify your answer. Type your answer in standard form.)