

HW: Worksheet

Write and graph a function for each situation.

3) A plant is 1in tall and grows 2.5in per day.

4) A phone call costs 5 cents a minute.

5) The mileage for your car is 25mi/gal.

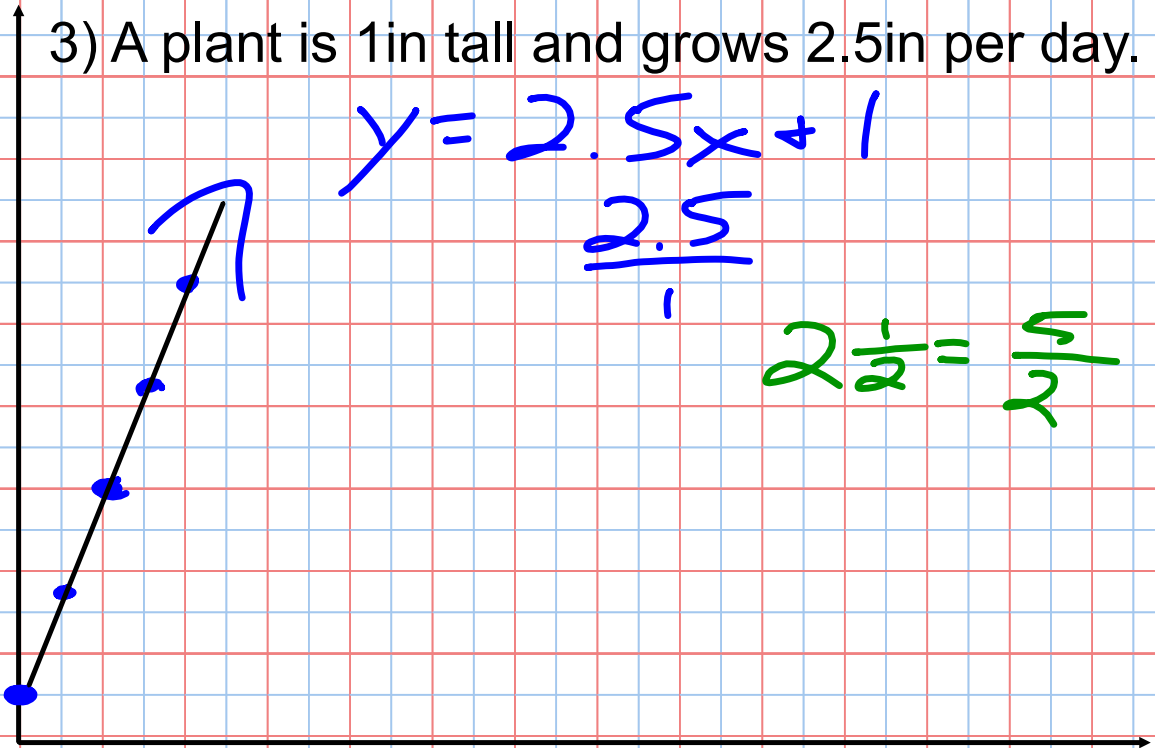
6) The yearbook committee spends \$8 to produce each yearbook and \$24 on advertising.

3) A plant is 1in tall and grows 2.5in per day.

$$y = 2.5x + 1$$

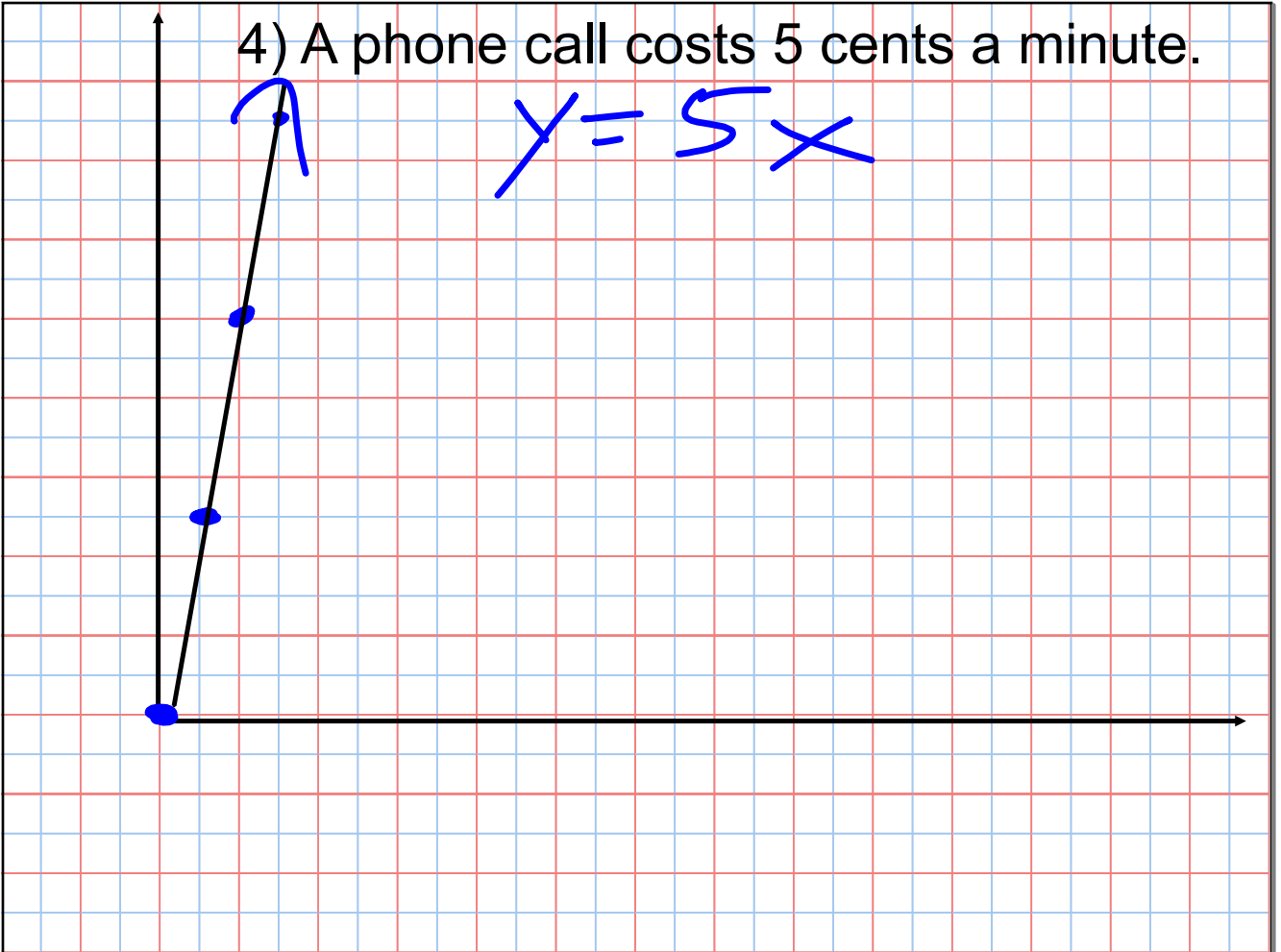
$$\frac{2.5}{1}$$

$$2\frac{1}{2} = \frac{5}{2}$$



4) A phone call costs 5 cents a minute.

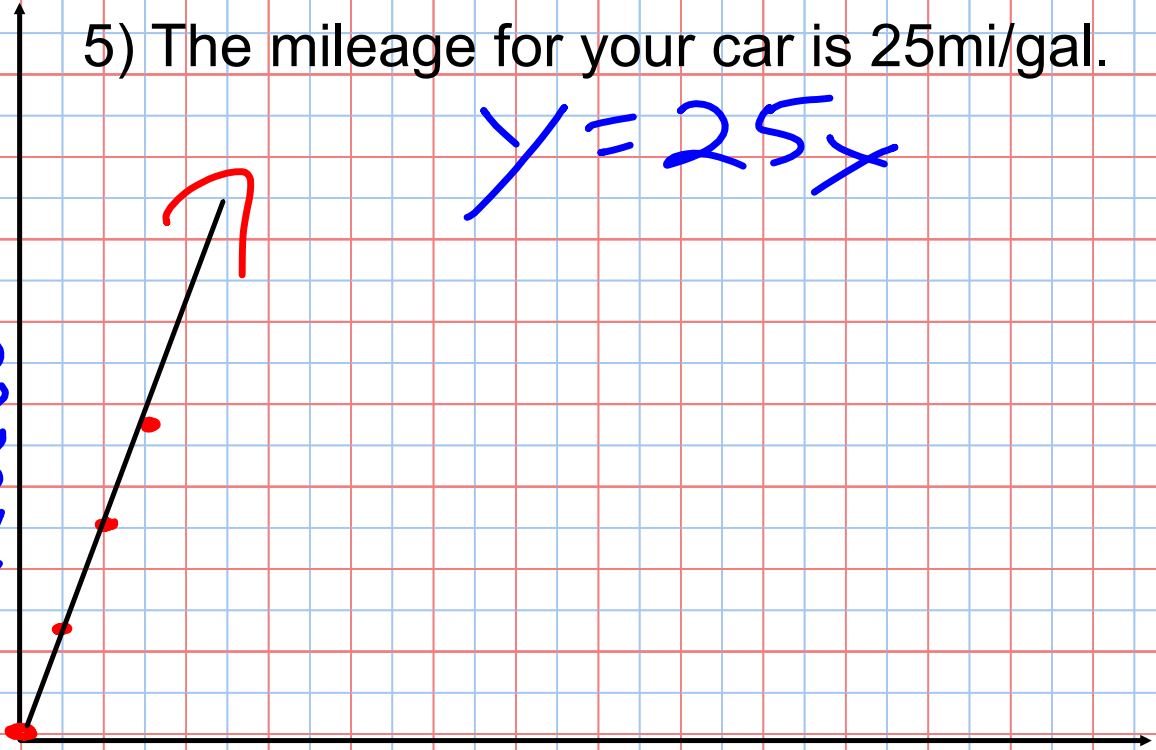
$$y = 5x$$



5) The mileage for your car is 25mi/gal.

$$y = 25x$$

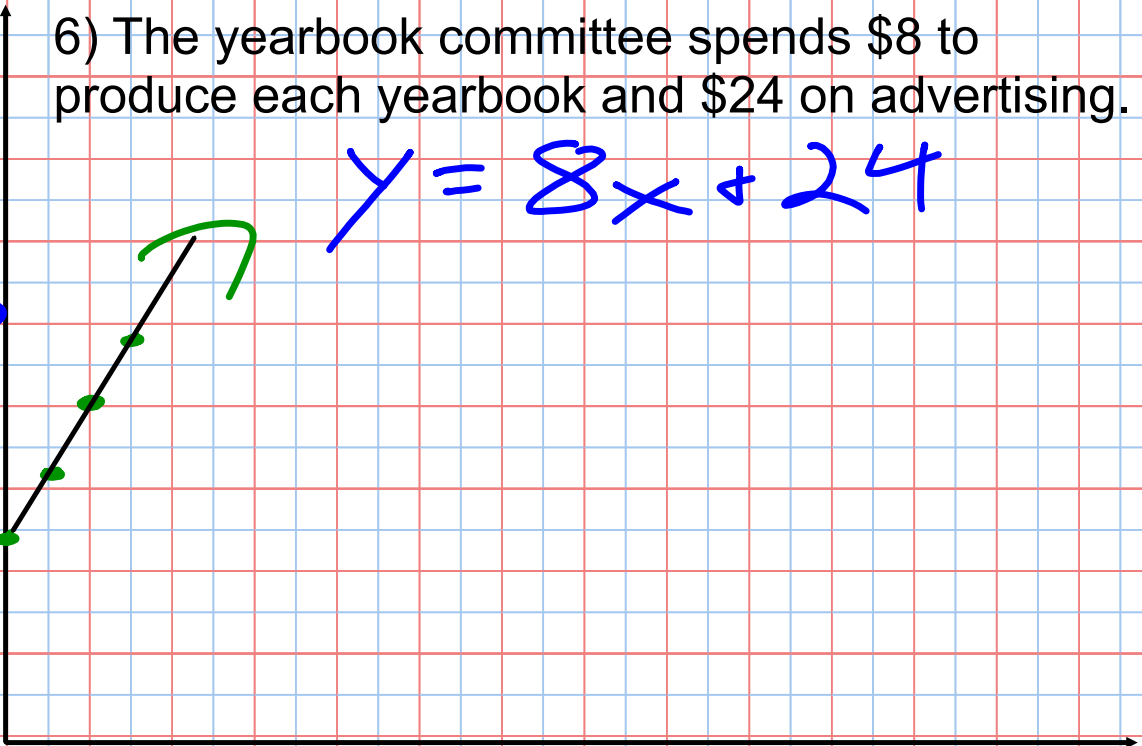
0
25
50
75
100
125
150
175
200



6) The yearbook committee spends \$8 to produce each yearbook and \$24 on advertising.

$$y = 8x + 24$$

Cost
\$0
\$50
\$100
\$150
\$200
\$250
\$300
\$350
\$400
\$450
\$500



A website is selling posters for \$5 each and charges a shipping fee of \$3 on all orders. Write a function to model the situation. What is the total cost of buying 7 posters?

$$y = 5x + 3$$
$$5(7) + 3$$
$$35 + 3$$
$$\text{\$ } 38$$

A ride in a taxi cab costs \$2.50 for the first mile and \$1.50 for each additional mile. Write a function that represents the total cost. What is the cost of a 10 mile ride? What is the cost of a 25 mile ride?

$$y = 1.50x + 2.50$$

$$1.50(9) + 2.50$$

$$\text{\$}16$$

$$1.5(24) + 2.5$$

$$\text{\$}38.50$$

Your cell phone bill costs \$60/month for a 1000 minute plan. You are charged 5¢ for each additional minute. Write a function to represent the total cell phone bill this month.

$$y = 0.05x + 60$$

$$y = 5x + 6000$$

1) You order books through a catalog. Each book costs \$12 and the shipping and handling cost of \$5 per order. Write a function that represents the total cost of an order. What is the total cost of ordering 6 books?

$$y = 12x + 5$$

$$12(6) + 5 = \text{\$77}$$

2) A tree is 3ft tall and grows $\frac{3}{4}$ in each day. Write a function to represent the height of the tree.

$$y = 3x + 36$$

$$y = \frac{1}{4}x + 3$$

3) Jared has a \$2 off coupon off any purchase. He decides to buy bulk dog food for \$0.50 per pound. Write a function to represent the total cost of an order. What is the total cost of buying 20 pounds of dog food?

$$y = 0.50x - 2$$

$$0.5(20) - 2 = \text{\$8}$$

4) A painter charges \$25 for ^{an} estimate and \$40 per hour while he's working.

$$y = 40x + 25$$

