Rate of Change & Initial Value · 1

The height of the candle in cm changes at a constant rate. After 4 hours it is 19, and after 8 hours it is 7. What is the rate of change per hour?

Rate of Change & Initial Value · 2

The fare in dollars changes at a constant rate. After 3 miles it is 18, and after 6 miles it is 33. What is the initial value (when x = 0)?

Rate of Change & Initial Value · 3

A taxi ride costs $3 plus $2 per mile. Write an equation for y, the fare in dollars, after x miles.

Rate of Change & Initial Value · 4

The water left in liters changes at a constant rate. After 4 minutes it is 269, and after 7 minutes it is 242. What is the rate of change per minute?

Rate of Change & Initial Value · 5

The water left in liters changes at a constant rate. After 4 minutes it is 252, and after 7 minutes it is 162. What is the initial value (when x = 0)?

Rate of Change & Initial Value · 6

A phone battery is at 93% and loses 8% every hour. Write an equation for y, the battery level in percent, after x hours.

Rate of Change & Initial Value · 7

The charge in dollars changes at a constant rate. After 4 hours it is 263, and after 7 hours it is 401. What is the rate of change per hour?

Rate of Change & Initial Value · 8

The charge in dollars changes at a constant rate. After 4 hours it is 305, and after 6 hours it is 415. What is the initial value (when x = 0)?

Rate of Change & Initial Value · 2

ANSWER

3

Rate of Change & Initial Value · 1

ANSWER

-3

Rate of Change & Initial Value · 4

ANSWER

-9

Rate of Change & Initial Value · 3

ANSWER

y = 2x + 3

Rate of Change & Initial Value · 6

ANSWER

y = -8x + 93

Rate of Change & Initial Value · 5

ANSWER

372

Rate of Change & Initial Value · 8

ANSWER

85

Rate of Change & Initial Value · 7

ANSWER

46

Rate of Change & Initial Value · 9

A taxi ride costs $4 plus $4 per mile. Write an equation for y, the fare in dollars, after x miles.

Rate of Change & Initial Value · 10

The amount he has saved in dollars changes at a constant rate. After 4 weeks it is 86, and after 6 weeks it is 96. Write an equation for y, the amount he has saved in dollars, after x weeks.

Rate of Change & Initial Value · 11

The amount he has saved in dollars changes at a constant rate. After 4 weeks it is 186, and after 7 weeks it is 219. What is the rate of change per week?

Rate of Change & Initial Value · 12

The fare in dollars changes at a constant rate. After 4 miles it is 23, and after 8 miles it is 39. What is the initial value (when x = 0)?

Rate of Change & Initial Value · 13

The total cost in dollars changes at a constant rate. After 1 month it is 66, and after 4 months it is 123. What is the rate of change per month?

Rate of Change & Initial Value · 14

The height of the candle in cm changes at a constant rate. After 2 hours it is 37, and after 6 hours it is 33. What is the initial value (when x = 0)?

Rate of Change & Initial Value · 15

A taxi ride costs $9 plus $3 per mile. Write an equation for y, the fare in dollars, after x miles.

Rate of Change & Initial Value · 16

The total cost in dollars changes at a constant rate. After 1 month it is 63, and after 4 months it is 117. Write an equation for y, the total cost in dollars, after x months.

Rate of Change & Initial Value · 10

ANSWER

$y = 5x + 66$

Rate of Change & Initial Value · 9

ANSWER

$y = 4x + 4$

Rate of Change & Initial Value · 12

ANSWER

7

Rate of Change & Initial Value · 11

ANSWER

11

Rate of Change & Initial Value · 14

ANSWER

39

Rate of Change & Initial Value · 13

ANSWER

19

Rate of Change & Initial Value · 16

ANSWER

$y = 18x + 45$

Rate of Change & Initial Value · 15

ANSWER

$y = 3x + 9$

Rate of Change & Initial Value · 17

The fare in dollars changes at a constant rate. After 3 miles it is 21, and after 7 miles it is 41. What is the rate of change per mile?

Rate of Change & Initial Value · 18

The height of the candle in cm changes at a constant rate. After 4 hours it is 20, and after 8 hours it is 4. What is the initial value (when x = 0)?

Rate of Change & Initial Value · 19

The charge in dollars changes at a constant rate. After 2 hours it is 227, and after 6 hours it is 475. What is the rate of change per hour?

Rate of Change & Initial Value · 20

The fare in dollars changes at a constant rate. After 2 miles it is 15, and after 4 miles it is 21. What is the initial value (when x = 0)?

Rate of Change & Initial Value · 21

A taxi ride costs $8 plus $2 per mile. Write an equation for y, the fare in dollars, after x miles.

Rate of Change & Initial Value · 22

The battery level in percent changes at a constant rate. After 1 hour it is 91, and after 4 hours it is 67. What is the rate of change per hour?

Rate of Change & Initial Value · 23

The amount he has saved in dollars changes at a constant rate. After 1 week it is 44, and after 4 weeks it is 95. What is the initial value (when x = 0)?

Rate of Change & Initial Value · 24

A candle is 24 cm tall and burns down 2 cm every hour. Write an equation for y, the height of the candle in cm, after x hours.

Rate of Change & Initial Value · 18

ANSWER

36

Rate of Change & Initial Value · 17

ANSWER

5

Rate of Change & Initial Value · 20

ANSWER

9

Rate of Change & Initial Value · 19

ANSWER

62

Rate of Change & Initial Value · 22

ANSWER

-8

Rate of Change & Initial Value · 21

ANSWER

y = 2x + 8

Rate of Change & Initial Value · 24

ANSWER

y = -2x + 24

Rate of Change & Initial Value · 23

ANSWER

27