Rate of Change & Initial Value · 1

Sam has $68 saved and adds $9 every week. What is the rate of change of the amount he has saved in dollars per week?

Rate of Change & Initial Value · 2

A phone battery is at 93% and loses 10% every hour. What is the battery level in percent after 4 hours?

Rate of Change & Initial Value · 3

The total cost in dollars changes at a constant rate. After 2 months it is 93, and after 6 months it is 177. What is the rate of change per month?

Rate of Change & Initial Value · 4

A tank holds 318 liters of water and drains 15 liters every minute. What is the initial value of the water left in liters?

Rate of Change & Initial Value · 5

A candle is 30 cm tall and burns down 2 cm every hour. What is the rate of change of the height of the candle in cm per hour?

Rate of Change & Initial Value · 6

A plumber charges $98 for a visit plus $74 per hour. What is the charge in dollars after 2 hours?

Rate of Change & Initial Value · 7

The total cost in dollars changes at a constant rate. After 1 month it is 126, and after 4 months it is 243. What is the rate of change per month?

Rate of Change & Initial Value · 8

Sam has $149 saved and adds $8 every week. What is the initial value of the amount he has saved in dollars?

Rate of Change & Initial Value · 2

ANSWER

53

Rate of Change & Initial Value · 1

ANSWER

9

Rate of Change & Initial Value · 4

ANSWER

318

Rate of Change & Initial Value · 3

ANSWER

21

Rate of Change & Initial Value · 6

ANSWER

246

Rate of Change & Initial Value · 5

ANSWER

-2

Rate of Change & Initial Value · 8

ANSWER

149

Rate of Change & Initial Value · 7

ANSWER

39

Rate of Change & Initial Value · 9

A taxi ride costs $3 plus $4 per mile. What is the rate of change of the fare in dollars per mile?

Rate of Change & Initial Value · 10

A taxi ride costs $3 plus $2 per mile. What is the fare in dollars after 6 miles?

Rate of Change & Initial Value · 11

The height of the candle in cm changes at a constant rate. After 4 hours it is 27, and after 7 hours it is 24. What is the rate of change per hour?

Rate of Change & Initial Value · 12

A candle is 37 cm tall and burns down 2 cm every hour. What is the initial value of the height of the candle in cm?

Rate of Change & Initial Value · 13

A gym charges a $61 sign-up fee plus $41 per month. What is the rate of change of the total cost in dollars per month?

Rate of Change & Initial Value · 14

A candle is 32 cm tall and burns down 2 cm every hour. What is the height of the candle in cm after 5 hours?

Rate of Change & Initial Value · 15

The battery level in percent changes at a constant rate. After 1 hour it is 85, and after 3 hours it is 73. What is the rate of change per hour?

Rate of Change & Initial Value · 16

A candle is 35 cm tall and burns down 2 cm every hour. What is the initial value of the height of the candle in cm?

Rate of Change & Initial Value · 10

ANSWER

15

Rate of Change & Initial Value · 9

ANSWER

4

Rate of Change & Initial Value · 12

ANSWER

37

Rate of Change & Initial Value · 11

ANSWER

-1

Rate of Change & Initial Value · 14

ANSWER

22

Rate of Change & Initial Value · 13

ANSWER

41

Rate of Change & Initial Value · 16

ANSWER

35

Rate of Change & Initial Value · 15

ANSWER

-6

Rate of Change & Initial Value · 17

The battery level in percent changes at a constant rate. After 4 hours it is 61, and after 8 hours it is 29. What is the rate of change per hour?

Rate of Change & Initial Value · 18

The battery level in percent changes at a constant rate. After 4 hours it is 62, and after 7 hours it is 41. What is the initial value (when x = 0)?

Rate of Change & Initial Value · 19

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 · 20

The amount he has saved in dollars changes at a constant rate. After 4 weeks it is 209, and after 8 weeks it is 285. What is the rate of change per week?

Rate of Change & Initial Value · 21

The charge in dollars changes at a constant rate. After 4 hours it is 247, and after 8 hours it is 379. What is the initial value (when x = 0)?

Rate of Change & Initial Value · 22

A tank holds 565 liters of water and drains 13 liters every minute. Write an equation for y, the water left in liters, after x minutes.

Rate of Change & Initial Value · 23

A taxi ride costs $6 plus $4 per mile. What is the rate of change of the fare in dollars per mile?

Rate of Change & Initial Value · 24

A phone battery is at 94% and loses 9% every hour. What is the battery level in percent after 5 hours?

Rate of Change & Initial Value · 18

ANSWER

90

Rate of Change & Initial Value · 17

ANSWER

-8

Rate of Change & Initial Value · 20

ANSWER

19

Rate of Change & Initial Value · 19

ANSWER

y = -8x + 93

Rate of Change & Initial Value · 22

ANSWER

y = -13x + 565

Rate of Change & Initial Value · 21

ANSWER

115

Rate of Change & Initial Value · 24

ANSWER

49

Rate of Change & Initial Value · 23

ANSWER

4