

MasterMath

Algebra

Equations and Functions

A slide with a black top-left corner, a grey top-right corner, a dark blue middle section with the text 'Algebra' and 'Equations and Functions', and a green grassy bottom section with a small speaker icon.



<http://archive.sba.gov/teens/ideas.html>

Auto Detailing- House Sitting-
Pool Service- Party Helper-
Bicycle Repair-
Personalized Greeting Cards-
Delivery Service-
Mail-Order Handicrafts-
Telemarketing- Tutoring-
Computer Consultant

Equations and Functions

A slide featuring a collage of images: a girl in a pink hat looking at a tablet, a person mowing a lawn, and a person working at a computer. The text lists various business ideas for teens.



You need to spend \$400 on tools
You'll spend \$10 per job on supplies
You'll charge \$30 per car

$C = \$400 + \$10x$
 $R = \$30x$
 $C = R$
 $\$400 + \$10x = \$30x$

Equations and Functions

A slide with a background image of two people detailing a car. The text provides a word problem and the corresponding equations for cost (C) and revenue (R).

\$400 + \$10x = \$30x

x	2	4	6	8	10	12	14	16	18	20	22	24
C	\$420	\$440	\$460	\$480	\$500	\$520	\$540	\$560	\$580	\$600	\$620	\$640
R	\$60	\$120	\$180	\$240	\$300	\$360	\$420	\$480	\$540	\$600	\$660	\$720

Table

$C = \$400 + \$10x$
 $R = \$30x$

Equations and Functions

\$400 + \$10x = \$30x

Graph

$y(C) = 400 + 10x$
 $y(R) = 30x$

x	2	4	6	8	10	12	14	16	18	20	22	24
C	\$420	\$440	\$460	\$480	\$500	\$520	\$540	\$560	\$580	\$600	\$620	\$640
R	\$60	\$120	\$180	\$240	\$300	\$360	\$420	\$480	\$540	\$600	\$660	\$720

Equations and Functions

\$400 + \$10x = \$30x

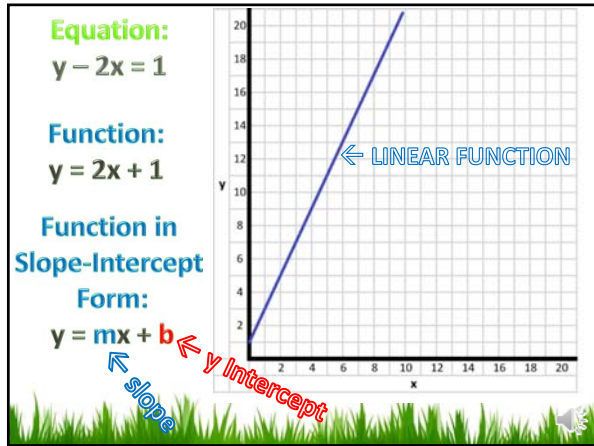
$400 + 10x - 10x = 30x - 10x$

$400 = 20x$

$400 \div 20 = 20x \div 20$

$20 = x$

Equations and Functions



Equations and Functions

YOU TRY IT

Hit your Pause Key, try the problem, then hit your Forward Key to move to the answer.

Solve this equation using a table, and with a graph, and with algebra:
 $2x + 6 = 4x - 2$

You try it!

Equations and Functions

x	2x + 6	4x - 2
1	8	2
2	10	6
3	12	10
4	14	14
5	16	18

YOU TRY IT

Hit your Pause Key, try the problem, then hit your Forward Key to move to the answer.

Solve this equation using a table, with a graph, and with algebra:
 $2x + 6 = 4x - 2$


You try it!

$2x + 6 = 4x - 2$
 $6 + 2 = 4x - 2x$
 $8 = 2x$
 $4 = x$

Equations and Functions

YOU TRY IT

Hit your Pause Key, try the problem, then hit your Forward Key to move to the answer.



$2x - 2$


$3x - 6$

Find x , and then find the perimeter of this square

You try it!

Equations and Function

$2x - 2 = 3x - 6$
 $-2 + 6 = 3x - 2x$
 $4 = x$



$2x - 2$

$3x - 6$

Find x , and then find the perimeter of this square

You try it!

$P = 4 * s = 4 * 4 = 16$

Equations and Functions

YOU TRY IT

Hit your Pause Key, try the problem, then hit your Forward Key to move to the answer.

This function is in Slope-Intercept Form. Graph the function:

$y = 2x + 3$

You try it!

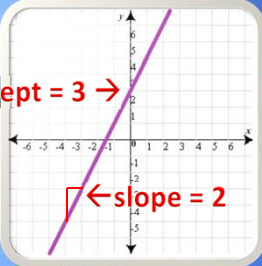
Equations and Functions

YMK TRY IT

This function is in Slope Form. Graph the function $y = 2x + 3$

y intercept = 3 →

← slope = 2





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Equations and Functions
