

2.5 Literal Equations

NOTES

ALGEBRA

Write your
questions here!



Solve each equation for x:

Ex 1:

Ex 2:

Are there any differences in how we solved these?

Now solve the following equation for a the same way.

REMEMBER:

Ex 3:

How is it different from the other equations? Solutions?

HOT TIP!

Ex 4: Area of a Triangle, solve for b

Ex 5: Perimeter of a Rectangle.

Use the following formula for interest and solve the given variables.

$A =$

Ex 6: Solve for P.

Ex 7: Solve for t.

You Try:

1) Solve for y.

2) Solve for x.

SUMMARY:

Now,
summarize
your notes
here!

2.5 Literal Equations

PRACTICE

Directions: Pick the best solution that solves each equation for the indicated variable.

1) $\frac{c}{a} = rd$, for a

- a) $a = \frac{c}{rd}$
- b) $a = -crd$
- c) $a = c + rd$
- d) $a = c - rd$

2) $g = xc - y$, for x .

- a) $x = -cg + cy$
- b) $x = \frac{g-y}{c}$
- c) $x = -g - y - c$
- d) $x = \frac{g+y}{c}$

Directions: Solve each equation for the indicated variable.

3) $2x - y = 7$, for y

4) $12x + 4y = 16$, for y

5) $2x - 3y = 9$, for y

6) $2x - y = 10$ for x

7) $A = \frac{1}{2}h(x + y)$, for x .

8) $y - a = m(x - b)$, for x

Directions: Simplify each expression.

9) $(2x + 6) - (6x^2 + 4x - 8)$

10) $(2y - 5)(2y + 5)$

11) $(2x + 6)(6x^2 + 4x - 8)$

12) $(2y - 5) + (2y + 5)$

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WRAP UP

Directions: Solve each equation for the indicated variable.

1) $y = mx + b$, for m .

2) $5x + 3y = 18$, for y

3. The Algebros solve the equation for y : $2x - 3y = 15$. Which one of their answers do you think is the BEST answer! CIRCLE IT!

BEAN: $y = \frac{2}{3}x - 5$

BRUST: $y = \frac{-2}{-3}x + \frac{15}{-3}$

KELLY: $y = .6x - 5$

SULLY: $y = \frac{-2x+15}{-3}$

SMP #2

Justify your reasoning with COMPLETE sentences.

Pick one of the Algebros that has a correct answer but that you didn't consider the best answer. Explain why you didn't believe they had the best answer. How could they have made their answer better?

EXIT TICKET –

Mr. Brust decides its high time to let the world know about his true passion...playing the Theremin and Tuvan Throat Singing. He books Wembley Stadium in London for his first LIVE SHOW!!! He decides to charge children \$14.50 and each adult \$27.25. He hopes to make at least \$100,000.

1) Pick two variables for this situation and define what they mean.

2) Write a formula using your variables (careful...is this formula an equation or inequality?).

3) Solve that formula for the variable that you have designated for the number of adults.