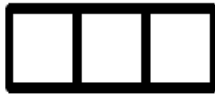


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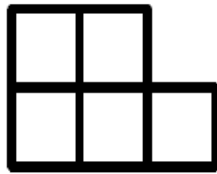
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Module 1 Study Guide

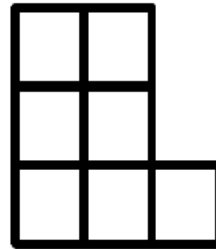
For this review sheet it is important to show your work **ON EVERY PROBLEM.**



Step 1



Step 2



Step 3

1. How many squares would there be in Step 50?
2. Write an expression for how many squares there would be in Step n .
3. How is each part of your expression in Question 1 seen in the figures shown above?
4. If a figure had 37 squares, what step would it be?
5. Are the following expressions equivalent? Justify your answer.

$$\frac{39n-13}{13}$$

$$3n + 13$$

6. Are the following expressions equivalent? Justify your answer.

$$-2(x + 3) - 5$$

$$\frac{4x + 22}{-2}$$

7. Are the following expressions equivalent? Justify your answer.

$$-2x + 5 + 7x - 15 - (3x - 1)$$

$$\frac{-4x}{-2} - 11$$

8. Solve the following equation. Make sure to justify each step with the properties you use.

$$7x + 3 = 59$$

Justification

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9. Solve the following equation. Make sure to justify each step with the properties you use.

$$2x - 5 = 5x - 5$$

Justification

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10. Solve the following equation. Make sure to justify each step with the properties you use.

$$3x - 2 = x - 5 + 2x$$

Justification

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11. What does the solution to #8 represent? (Hint: If you write “the answer”, it will be wrong.)

12. Solve the following inequality: $3(x + 1) \geq 12x + 21$. Write your answer as an inequality.

13. Graph the inequality from Question #12 on the line below.

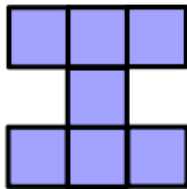


14. Solve the following inequality: $-3x + 3 < -9$. Plot your solution on a number line.

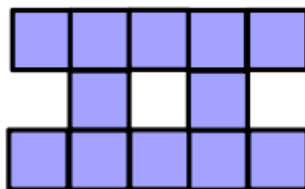
15. Solve the following equation for X: $\frac{AX-Y}{F} + T = W$

16. Solve the following equation for y: $Ax + By = C$

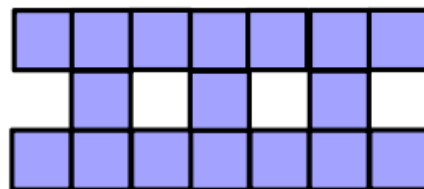
17. Solve the following equation for t: $d = rt$



Step 1



Step 2



Step 3

18. How many squares would there be in Step 100?

19. Write an expression for how many squares there would be in Step n.

20. How is each part of your expression in Question 1 seen in the figures shown above?

21. If a figure had 37 squares, what step would it be?