Created by Mr. Lischwe WARMUP 11/ (*The most likely sum when you roll two dice*)

1) Copy the diagram and use it to figure out how many squares match up to each "x".



2) Write an equation to match the picture and solve it.
Make sure there is a

whiteboard, marker, & eraser in your desk!



COLLECT WARMUPS



NOTE ABOUT ALEKS

•For this weekend ONLY, I will extend the ALEKS deadline until Monday at midnight.



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Mostly whiteboards today, but we will write a few of them in our notes!!!

Equations w/ Variables on Both Sides

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Objective:

- Solve equations with variables on both sides
- Understand the difference with when they're on the same side and when they're not



<u>2 variable terms on the SAME SIDE:</u> Combine like terms

<u>2 variable terms on OPPOSITE SIDES:</u> "Get rid" of one of them: add or subtract the x's on both sides the same way you do with regular numbers



WHITEBOARD EXPECTATIONS

- -SHOW YOUR WORK!
- Hold it up when done
- Early finishers should check their solution.
- •Offer help if someone is stuck!



$$3x + 2x = 45$$

5x=45

 $\mathbf{x} = \mathbf{9}$



 $\frac{4x}{-2x} = \frac{2x}{-7x} + 18$ $\mathbf{x} = \mathbf{9}$



6x - 2x = 884x = 88

x = 22



5x + 4 = 2x + 16 3x + 4 = 16 -4 - 4 3x = 12 x = 4



 $\frac{3x - 16}{5x - 16} = \frac{-2x}{5x - 16} + \frac{34}{34}$ $\frac{+16}{5\chi} = 50$

x = 10





 $\mathbf{x} = \mathbf{1}$



x + 5 = 5x - 8 $5 = 4 \times -8$ + 8 78 78

 $\mathbf{x} = \frac{13}{4} \text{ or } 3.25$ Early finishers: Check your answer!



2x - 50 = 8x - 20-50 = 6x - 36+ 20 -30 = 6x**X = 5**



4x + 4 = x - 11<u>-×</u> -× 3x + 4 = -11-4 -4 $3 \times = -1S$ **X = -5**



SOME FOR YOUR NOTES:

SOLVE AND CHECK: -3x + 31 = 2x + 6 $31 = 5 \times + 6$ 25=5× 555

Check -3(5)+3(=2(5)+6-|5+3| = 10+616 = 16



SOME FOR YOUR NOTES...















 $\frac{3}{5} - \frac{35}{1} = \frac{-105}{5} = -21$











$$2x + 7 = 5x + 35$$

$$x = -\frac{28}{3} or - 9\frac{1}{3}$$





