Entry Screener 'A'

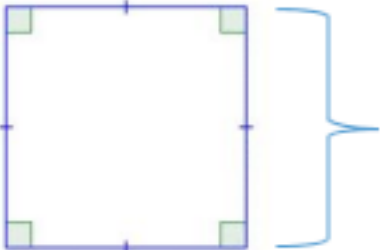|	
1. Write the value of the underlined digit in words or fraction form. **322.1_4_8**	2. Solve $$\sqrt{36}=$$
3. Without calculating an answer, place the decimal point in the correct position. $$653.73-104.54=54919$$	4. Without calculating an answer, place the decimal point in the correct position. $$471.35\div98.2=425$$

5. Show where $\sqrt{55}$ would approximately lie on the number line.

6. A square has an area of 81 cm². What is the length of one side of this square?

A = of 81 cm²   Side Length = _____

7. Find the length of side 'C'.
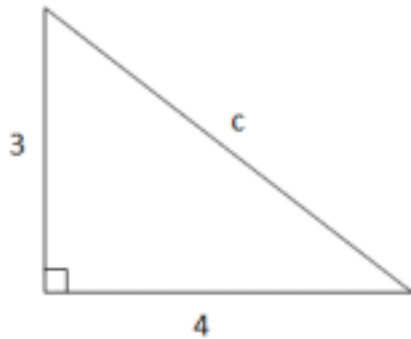
Side C = _____

8. Find the length of the missing side labeled 'x'.
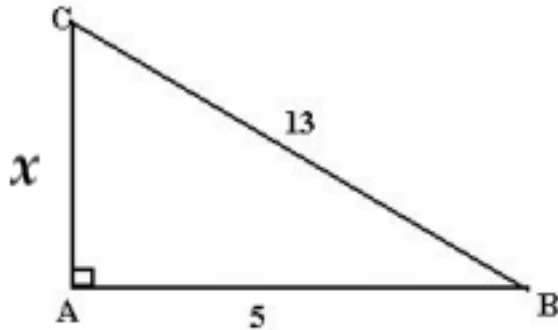
x = _____

9. Write 0.06 as a fraction.	10. Write $\frac{3}{100}$ as a percent.
11. Write 45% as a decimal.	12. Write 28% as a fraction.

13. Convert $\frac{18}{5}$ to a mixed number.	14. Write $2\frac{3}{5}$ as an improper fraction (common fraction).	15. Add: $$\frac{2}{9} + \frac{5}{9}$$

9.1

16. Write $\frac{8}{12}$ in lowest terms.	17. Subtract $$\frac{3}{4} - \frac{1}{8} =$$	18. Order least to greatest: 0.64 0. 8 0.259 ___ ___ ___
19. Express $\frac{3}{4}$ as a percent.	20. Express $\frac{1}{5}$ as a decimal.	21. Express 12% as a fraction in simplest terms.

22. Write the following fractions on the number line below:

$$\frac{14}{20}, \frac{13}{10}, \frac{9}{5}, 1\frac{3}{5}, 1$$

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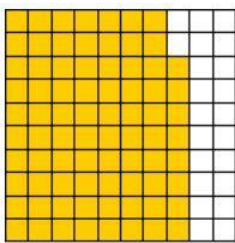| 23. Express as a mixed number.	24. Express as an improper fraction:
25. Subtract: $$6\frac{5}{8} - 2\frac{1}{4} =$$	26. Add: $$5\frac{1}{4} + 3\frac{1}{2} =$$
27. Divide: $$\frac{1}{2} \div 3 =$$	28. Multiply: $$\frac{2}{7} \times 5 =$$
29. Multiply: $$\frac{4}{7} \times \frac{2}{3} =$$	30. Divide: $$\frac{3}{4} \div \frac{2}{5} =$$
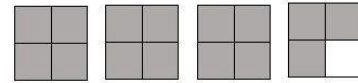
31. Solve:

$$1\frac{1}{3} \times \left(\frac{5}{8} + \frac{3}{4} - \frac{5}{6}\right) =$$

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32. A vehicle travels 256 km in 4 hours. What is its rate of speed?	33. The ratio of vitamin powder to orange juice is 2 scoops to 3 cups of juice. How many scoops of powder are required for a 12 cup pitcher of juice?

34. Solve: $(+8) + (-6) =$	35. Solve: $(-5) - (-4) =$	36. Solve: $(-3)(-8) + (24) \div (-2) =$

37. Solve: $5 \times 3 + 12 \div 2 =$	38. Solve: $20 - 6(2) \div 4 + 7 =$	39. Solve: $\dfrac{6(-8)}{-12} - 1 =$

40. Place these integers on the number line: **+4, 0, -3, +7, -5, -1, +1**

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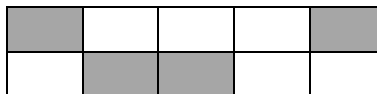
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41. Order the following from greatest to least:

$$\frac{5}{2}, \ 1.4, \ 1\frac{1}{4}, \ 0.9, \ 0, \ 1$$

42. What percent of the diagram is shaded?	43. What percent of the diagram is shaded?	44. Rewrite as a percentage:
		$0.03 = \ \_\_\_\%$

45. Write 0.045 as a percent.	46. Write 156% as a decimal.	47. Find 35% of 260.
$0.045 = \ \_\_\_\%$	$156\% = \ _____$	

48. What is 10% of 438?	49. Last year 340 people came to the grade 9 track meet. This year the audience was 120% of what it was last year. How many people came this year?	50. Solve: $0.458 \times 6 =$

51. Divide: $6.52 \div 2 =$	52. Divide: $3.22 \div 0.5 =$	53. What integer is 3more than -5?

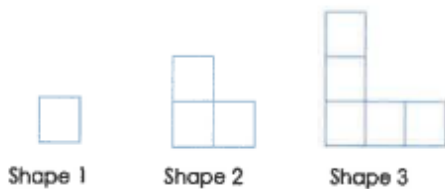**54. What is the greatest common factor (GCF) of 16 and 48?**

55. What is the least common multiple (LCM) of 18 and 45?

56. What is the pattern rule?

Write an expression to represent the pattern.

Input	Output
1	2
2	5
3	8
4	11

57. Write a rule for this pattern and use it to find the number of blocks in Shape 20.

Rule:

Shape 1   Shape 2   Shape 3

Shape number n	Number of Blocks
1	
2	
3	
4	
5	
20	

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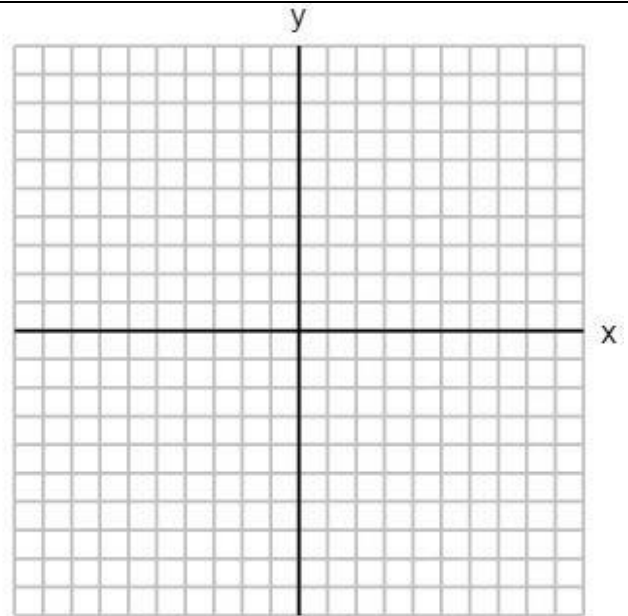| 58. Write an expression for "three times a number minus four."	59. Write an equation for the statement "four times a number equals 20."

60. The ski club is planning a trip, and the bus company will charge them using the formula $C = 30 + 50n$, where C is the cost for n people. Find the cost if 12 people are going.

61. Complete the table of values for the equation:

$$y = -3x + 2$$

x	y
-1	5
0	2
1	
2	-4
	-7
4	

62. Circle the ordered pair(s) that belong to the linear relation $y = 3x - 5$

(2,7)   (2,1)   (3,2)

63. Solve	64. Solve

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$w - 25 = 34$	$16 = 3x + 4$
65. Solve $$\frac{3x}{2} - 4 = 5$$	66. Solve $$-3(m - 2) = 21$$