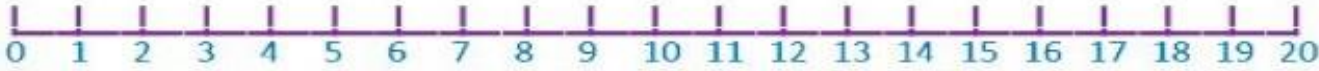
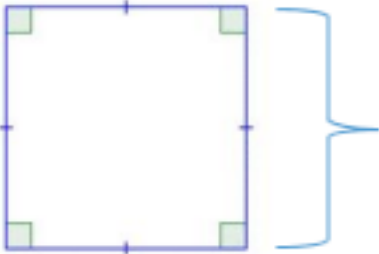
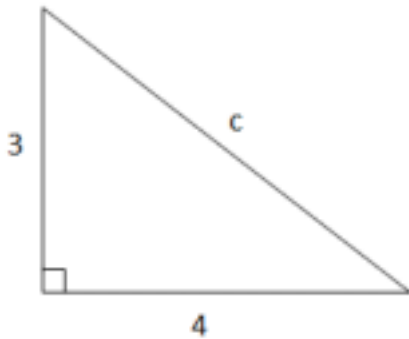


Grade 9 Entry Screener 'A'

Teacher

<p>1. Write the value of the underlined digit in words or fraction form.</p> <p style="text-align: center; font-size: 1.2em;">322.<u>1</u>48</p>	<p>2. Solve</p> <p style="text-align: center; font-size: 1.5em;">$\sqrt{36} =$</p>
N7.2 Decimals	N8.1 Decimals
<p>3. Without calculating an answer, place the decimal point in the correct position.</p> <p style="text-align: center; font-size: 1.2em;">653.73 – 104.54 = 54919</p>	<p>4. Without calculating an answer, place the decimal point in the correct position.</p> <p style="text-align: center; font-size: 1.2em;">471.35 ÷ 98.2 = 425</p>
N7.2 Decimals	N7.2 Decimals
<p>5. Show where $\sqrt{55}$ would approximately lie on the number line.</p> <div style="text-align: center; margin: 10px 0;">  </div>	
R N8.1 Square Roots	
<p>6. A square has an area of 81 cm². What is the length of one side of this square?</p> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="margin-right: 20px;">  </div> <div> <p>A = of 81 cm² Side Length = _____</p> </div> </div>	
R N8.1 Square Roots	

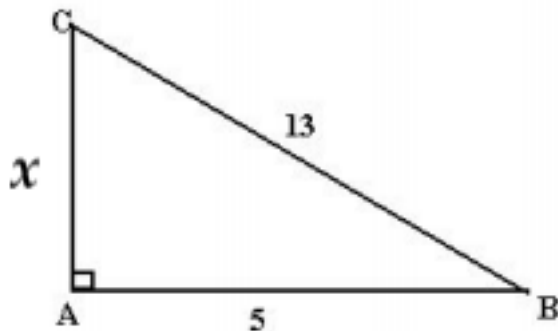
7. Find the length of side 'C'.



Side C = _____

Pyth N8.1 Square Roots

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



x = _____

Pyth N8.1 Square Roots

9. Write 0.06 as a fraction.

10. Write $\frac{3}{100}$ as a percent.

F DC N7.4 Parts of a Whole

F P N7.4 Percents

11. Write 45% as a decimal.

12. Write 28% as a fraction.

F P N7.4 Percents

F P N7.4 Percents

13. Convert $\frac{18}{5}$ to a mixed number.

14. Write $2\frac{3}{5}$ as an improper fraction (common fraction).

15. Add:

$$\frac{2}{9} + \frac{5}{9}$$

F N6.7 Fractions

F N6.7 Fractions



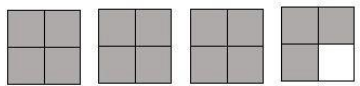
F N7.5 Fractions


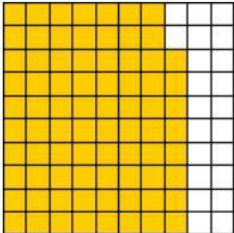
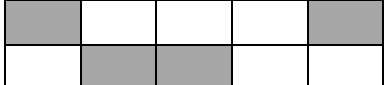
16. Write $\frac{8}{12}$ in lowest terms.

17. Subtract $\frac{3}{4} - \frac{1}{8} =$

18. Order least to greatest:

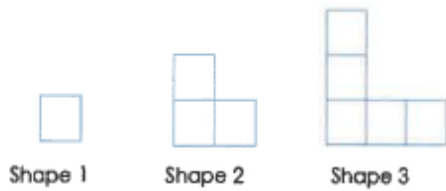
0.64 0.8 0.259

F N7.5 Fractions	F N7.5 Fractions	DC O N 5.6 Decimals
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.
F P N8.2 Fractions Decimals and Percents	F P N8.2 Fractions Decimals and Percents	F P N8.2 Fractions Decimals and Percents
22. Write the following fractions on the number line below:		
$\frac{14}{20}, \frac{13}{10}, \frac{9}{5}, 1\frac{3}{5}, 1$		
		
O F N6.7 Fractions		
23. Express as a mixed number.	24. Express as an improper fraction:	
		
O F N6.7 Fractions	O F N6.7 Fractions	
25. Subtract:	26. Add:	
$6\frac{5}{8} - 2\frac{1}{4} =$	$5\frac{1}{4} + 3\frac{1}{2} =$	
F N 7.5 Fractions +/-	F N 7.5 Fractions +/-	
27. Divide:	28. Multiply:	
$\frac{1}{2} \div 3 =$	$\frac{2}{7} \times 5 =$	
F N8.4 Fractions	F N8.4 Fractions	
29. Multiply:	30. Divide:	
$\frac{4}{7} \times \frac{2}{3} =$	$\frac{3}{4} \div \frac{2}{5} =$	

F N8.4 Fractions \times/\div		F N8.4 Fractions \times/\div
31. Solve: $1\frac{1}{3} \times \left(\frac{5}{8} + \frac{3}{4} - \frac{5}{6}\right) =$		
OO F N8.4 Fractions		
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?	
R N 8.3 Proportional Reasoning, rates		R N 8.3 Proportional Reasoning, rates
34. Solve: $(+8) + (-6) =$	35. Solve: $(-5) - (-4) =$	36. Solve: $(-3)(-8) + (24) \div (-2) =$
I N 7.6 Integers	I N 7.6 Integers	I O N8.5 Integers
37. Solve: $5 \times 3 + 12 \div 2 =$	38. Solve: $20 - 6(2) \div 4 + 7 =$	39. Solve: $\frac{6(-8)}{-12} - 1 =$
OO N 6.3 Order of Operations	OO N 6.3 Order of Operations	I OO N8.5 Integers
40. Place these integers on the number line: +4, 0, -3, +7, -5, -1, +1		
		
I O N 6.6 Integers		
41. Order the following from greatest to least: $\frac{5}{2}, 1.4, 1\frac{1}{4}, 0.9, 0, 1$		
F DC O N7.3 Ordering fractions, decimals and whole numbers		
42. What percent of the diagram is shaded? 	43. What percent of the diagram is shaded? 	44. Rewrite as a percentage: $0.03 = \underline{\quad}\%$

P N 6.5 Percents	P N 6.5 Percents	P N 6.5 Percents										
45. Write 0.045 as a percent. 0.045 = ____%	46. Write 156% as a decimal. 156% = _____	47. Find 35% of 260.										
P N8.2 Percents	P N8.2 Percents	P N8.2 Percents										
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 x 6 =										
P N8.2 Percents	P N8.2 Percents	P N8.2 Percents										
51. Divide: 6.52 ÷ 2 =	52. Divide: 3.22 ÷ 0.5 =	53. What integer is 3 more than -5?										
M D N. 6.4 Multiplying Decimals	D O N7.2 Decimals	M D N 6.6 Integers										
54. What is the greatest common factor (GCF) of 16 and 48?	55. What is the least common multiple (LCM) of 18 and 45?											
FM N 6.2 Factors and Multiples	FM N 6.2 Factors and Multiples											
56. What is the pattern rule? Write an expression to represent the pattern.												
<table border="1"> <thead> <tr> <th>Input</th> <th>Output</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>2</td> <td>5</td> </tr> <tr> <td>3</td> <td>8</td> </tr> <tr> <td>4</td> <td>11</td> </tr> </tbody> </table>			Input	Output	1	2	2	5	3	8	4	11
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 number n	Number of Blocks
1	
2	
3	
4	
5	
20	

P 6.1 / P 7.1 Patterns and Relations

58. Write an expression for “three times a number minus four.”

59. Write an equation for the statement “four times a number equals 20.”

EQ P6.3 P7.2 Solving Equations

EQ P6.3 P7.2 Solving Equations

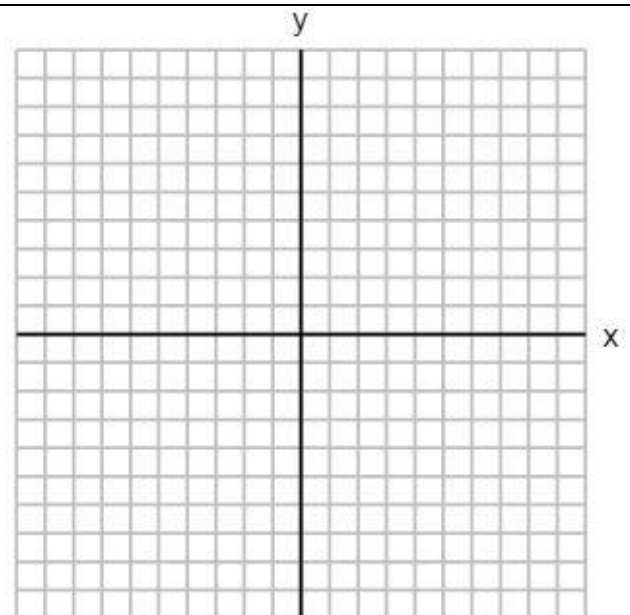
60. The ski club is planning a trip, and the bus company will charge them using the formula $C = 30 + 50n$, where C is the cost for n people. Find the cost if 12 people are going.

N8.2 Linear Equations

61. Complete the table of values for the equation:

$$y = -3x + 2$$

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



P8.1 Linear relations	
62. Circle the ordered pair(s) that belong to the linear relation $y = 3x - 5$	
(2,7) (2,1) (3,2)	
P8.1 Linear relations	
63. Solve	64. Solve
$w - 25 = 34$	$16 = 3x + 4$
EQ P7.3 Solving equations	EQ P7.3 Solving equations
65. Solve	66. Solve
$\frac{3x}{2} - 4 = 5$	$-3(m - 2) = 21$
EQ P7.3 Solving equations	E P8.2 Solving equations