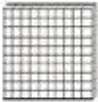
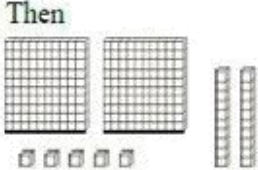


# Grade 7 Entry Screener 'A'

## Key

<p>1. Continue counting.</p> <p>532 996, 532 997, 532 998, <u>532 999</u>, <u>533 000</u>, <u>533 001</u></p>	<p>2. Write the value of the underlined digit in numbers or words.</p> <p>5 <u>2</u>63 754</p> <p><b>200 000 or</b> <b>2 (two) hundred thousand</b></p>
<p>3. Write the value of the underlined digit in words or fraction form.</p> <p>56.<u>9</u>74</p> <p><b><math>\frac{7}{100}</math> or seven hundredths</b></p>	<p>4. Write the value of the number represented by the base 10 blocks.</p> <p>If  = 1</p> <p>Then </p> <p><b>2.25</b></p>
<p>5. Write the number 48 203 055 in expanded form.</p> <p><b>40 000 000 + 8 000 000 + 200 000 + 3 000 + 50 + 5</b></p>	
<p>6. Write the number 37 021 977 in word form:</p> <p><b>thirty-seven million twenty-one thousand nine hundred seventy-seven</b></p>	

7. This number is written in expanded form:

$$70\ 000\ 000 + 5\ 000\ 000 + 40\ 000 + 2\ 000 + 90 + 3$$

Rewrite the number in **standard number** form.

**75 042 093**

8. Write the number nine hundred thousand five hundred thirty-seven in **standard** form.

**900 537**

9. Write in lowest terms:

$$\frac{12}{18}$$

$$\frac{2}{3}$$

10. Change to a mixed number:

$$\frac{25}{7}$$

$$3\frac{4}{7}$$

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

$$\frac{17}{5}$$

12. Write  $>$ ,  $<$ , or  $=$

$$\frac{1}{3} \quad \textcircled{>} \quad \frac{1}{4}$$

13. Write  $>$ ,  $<$ , or  $=$

$$\frac{4}{10} \quad \textcircled{=} \quad \frac{12}{30}$$

14. Order least to greatest:

0.64, 0.8, 0.259

**0.259 0.64 0.8**

15. Express as a mixed number.



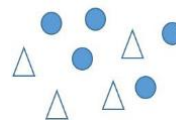
$$2\frac{3}{4}$$

16. Express as an improper fraction.


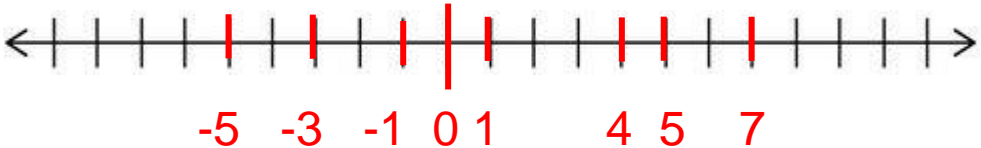
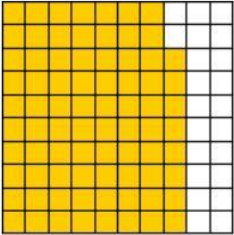
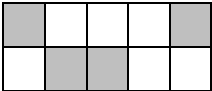


$$\frac{15}{4}$$

17. What is the ratio of triangles to circles?



**4:5**

<p>18. What is being compared by the ratio 3:8?</p>  <p><b>dogs to all</b></p>	<p>19. Express <math>\frac{8}{3}</math> as mixed number.</p> <p><b><math>2\frac{2}{3}</math></b></p>	<p>20. Write <math>5\frac{1}{4}</math> as an improper fraction.</p> <p><b><math>\frac{21}{4}</math></b></p>
<p>21. Place these integers on the number line: +4, 0, -3, +7, -5, -1, +1</p> 		
<p>22. Write <math>\frac{7}{100}</math> as a decimal.</p> <p><b>0.07</b></p>	<p>23. Write 0.337 as a fraction.</p> <p><b><math>\frac{337}{1000}</math></b></p>	<p>24. Convert 0.06 to a percentage.</p> <p>0.06 = <u>6</u>%</p>
<p>25. What percent of the diagram is shaded?</p>  <p><b>78%</b></p>	<p>26. What percent of the diagram is shaded?</p>  <p><b>40%</b></p>	<p>27. Add:</p> <p>5.783 + 366.291 =</p> <p><b>372.074</b></p>
<p>28. Subtract:</p> <p>56.854 - 41.243 = <b>15.611</b></p>	<p>29. Subtract:</p> <p>63.052 - 9.548 = <b>53.504</b></p>	<p>30. Multiply:</p> <p>4 x 675 = <b>2 700</b></p>

<p>31. Multiply:</p> $45 \times 1\,000 = \mathbf{45\,000}$	<p>32. Multiply:</p> $3 \times 15 = \mathbf{45}$	<p>33. Divide:</p> $315 \div 4 = \mathbf{78\,R3}$ <p>or</p> $78\frac{3}{4}$ <p>or</p> $78.75$ $\begin{array}{r} 78 \\ 4 \overline{)315} \\ \underline{-28} \\ 35 \\ \underline{-32} \\ 3 \end{array}$										
<p>34. Multiply:</p> $4.586 \times 6 = \mathbf{27.516}$	<p>35. Divide:</p> $6.52 \div 4 = \mathbf{1.63}$ $\begin{array}{r} 1.63 \\ 4 \overline{)6.52} \\ \underline{-4} \\ 252 \\ \underline{-24} \\ 12 \\ \underline{-12} \\ 0 \end{array}$	<p>36. What integer is 3 more than -5?</p> <p style="text-align: center;"><b>-2</b></p>										
<p>37. What is the greatest common factor (GCF) of 16 and 24?</p> <table style="width: 100%; border: none;"> <tbody> <tr> <td style="text-align: center;">16</td> <td style="text-align: center;">24</td> </tr> <tr> <td style="text-align: center;">1 x 16</td> <td style="text-align: center;">1 x 24</td> </tr> <tr> <td style="text-align: center;">2 x <b>8</b></td> <td style="text-align: center;">2 x 12</td> </tr> <tr> <td style="text-align: center;">4 x 4</td> <td style="text-align: center;">3 x <b>8</b></td> </tr> <tr> <td></td> <td style="text-align: center;">4 x 6</td> </tr> </tbody> </table> <p style="text-align: center;"><b>8</b></p>	16	24	1 x 16	1 x 24	2 x <b>8</b>	2 x 12	4 x 4	3 x <b>8</b>		4 x 6	<p>38. What is the least common multiple (LCM) of 9 and 12?</p> <p style="text-align: center;">9, 18, 27, <b>36</b></p> <p style="text-align: center;">12, 24, <b>36</b></p> <p style="text-align: center;"><b>36</b></p>	<p>39. Circle the prime number.</p> <p style="text-align: center;">18, 15, <b>17</b></p>
16	24											
1 x 16	1 x 24											
2 x <b>8</b>	2 x 12											
4 x 4	3 x <b>8</b>											
	4 x 6											

40. Solve. (Use order of operations.)

$$5 \times 3 + 12 \div 2 =$$

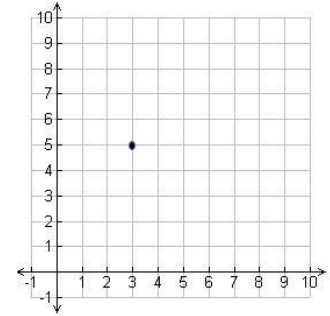
$$\begin{aligned} &15 + 6 \\ &21 \end{aligned}$$

41. Solve. (Use order of operations.)

$$20 - 6(2) \div 4 + 7 =$$

$$\begin{aligned} &20 - 12 \div 4 + 7 \\ &20 - 3 + 7 \\ &17 + 7 \\ &24 \end{aligned}$$

42. What are the coordinates of the point?



**(3,5)**

43. Complete the table.

Input	Output
2	<b>7</b>
3	9
<b>4</b>	11
5	<b>13</b>
6	15

44. Solve for  $x$ :

$$\begin{aligned} 7 + x &= 15 \\ x &= 15 - 7 \\ x &= 8 \end{aligned}$$

45. Solve for  $x$ :

$$\begin{aligned} 3x &= 21 \\ x &= 21 \div 3 \\ x &= 7 \end{aligned}$$

46. What is the pattern rule? Write an expression to represent the pattern.

Input	Output
1	2
2	5
3	8
4	11

$$3n - 1$$

47. Fill in the table for  $y = 2x + 3$

$x$	$y$
1	<b>5</b>
2	<b>7</b>
3	<b>9</b>
4	<b>11</b>

48. Fill in the table for  $y = 2x - 1$

1	<b>1</b>
3	<b>5</b>
5	<b>9</b>
10	<b>19</b>

49. Write an expression for "three times a number a number minus four."

$$3n - 4$$

50. Write an equation for the statement "four times a number equals 20."

$$4n = 20$$