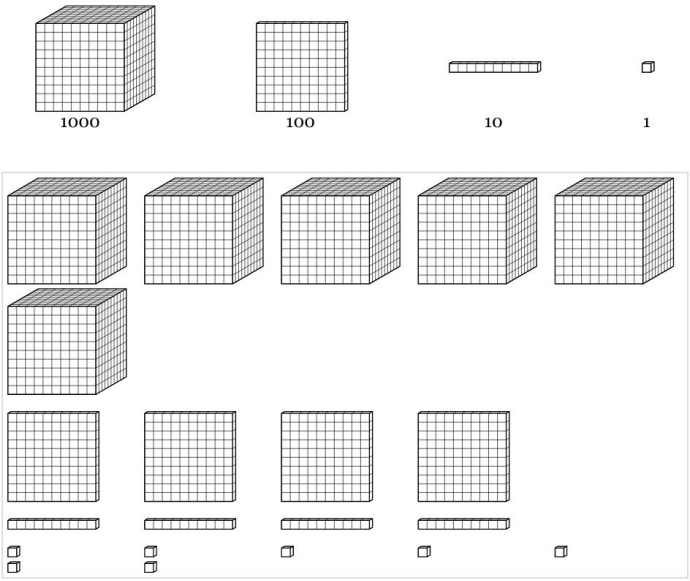
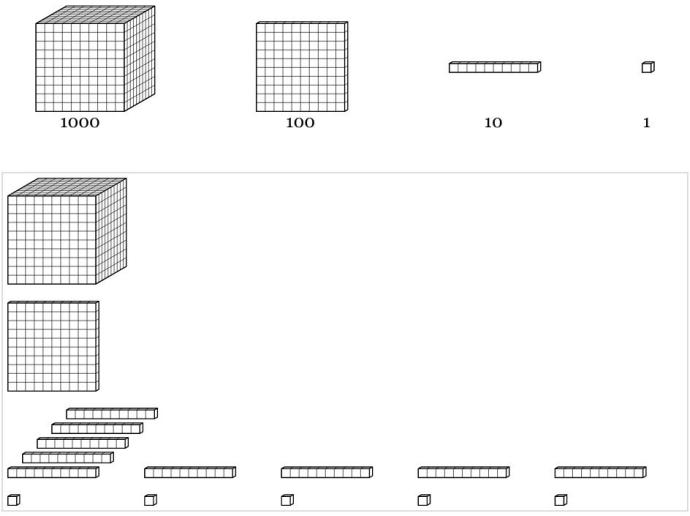
Name: _____ **Prepare for 6th Grade Math Summer Assignment (2026)**

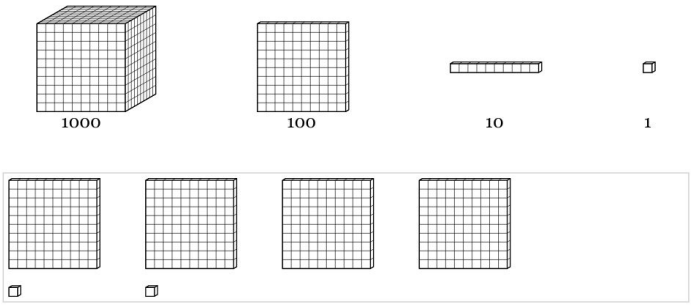
1. What number is represented by the base ten blocks shown below?



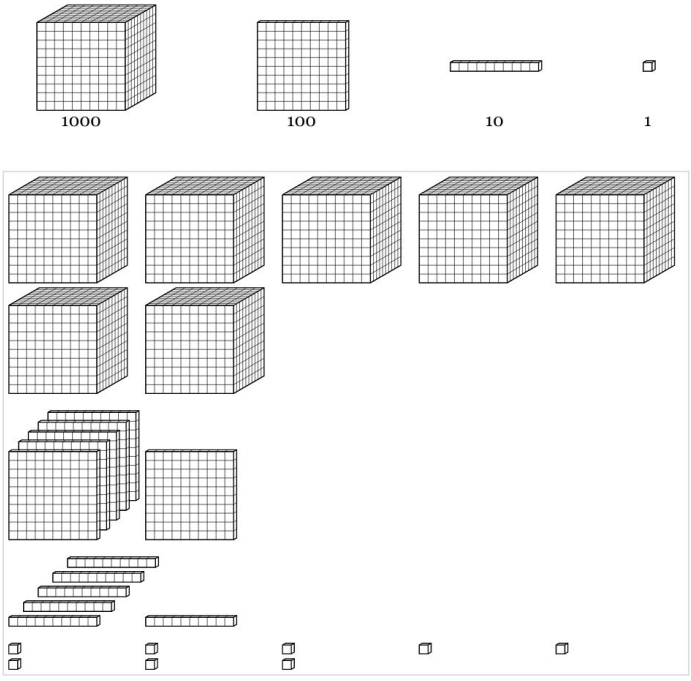
2. What number is represented by the base ten blocks shown below?



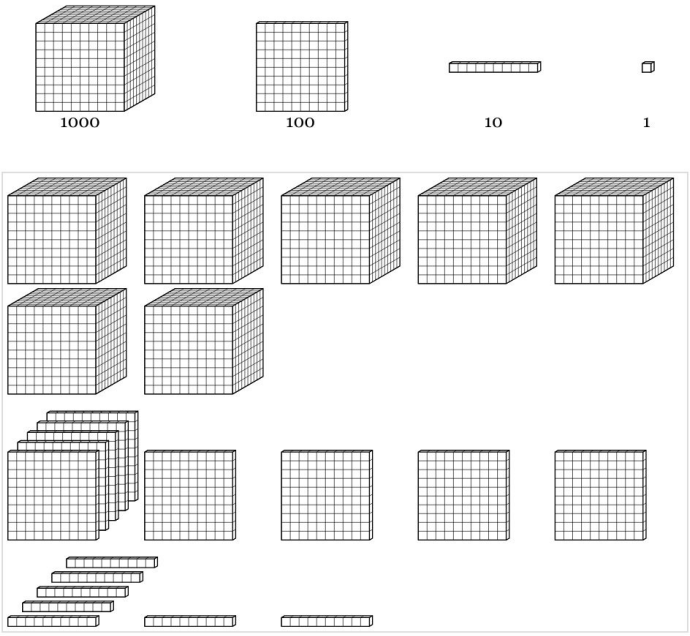
3. What number is represented by the base ten blocks shown below?



4. What number is represented by the base ten blocks shown below?



5. What number is represented by the base ten blocks shown below?



6. Evaluate: $57000 \div 10$

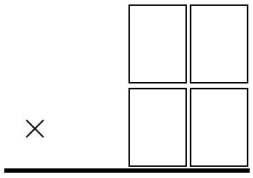
7. Evaluate: 7200×10

8. Evaluate: 1400×10

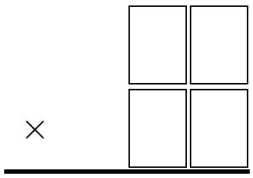
9. Evaluate: 9200×10

10. Evaluate: 300×10

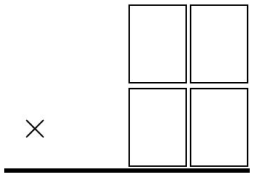
11. Complete the standard multiplication algorithm for 74×59, including any "carried," or regrouped digits, if necessary.



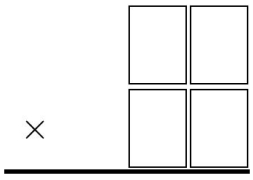
12. Complete the standard multiplication algorithm for 46×62, including any "carried," or regrouped digits, if necessary.



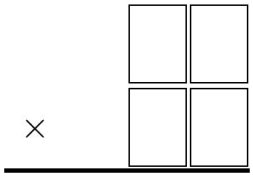
13. Complete the standard multiplication algorithm for 34×49, including any "carried," or regrouped digits, if necessary.



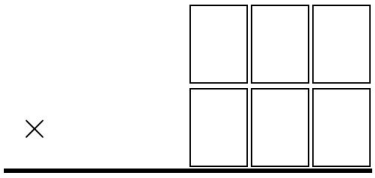
14. Complete the standard multiplication algorithm for 34×83, including any "carried," or regrouped digits, if necessary.



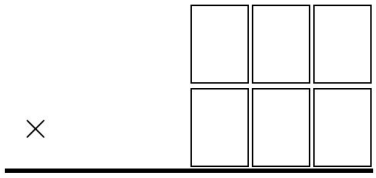
15. Complete the standard multiplication algorithm for 72×35, including any "carried," or regrouped digits, if necessary.



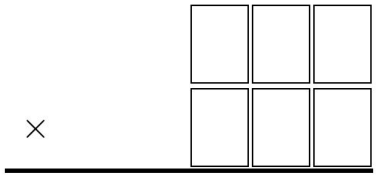
16. Complete the standard multiplication algorithm for 587×357, including any "carried," or regrouped digits, if necessary.



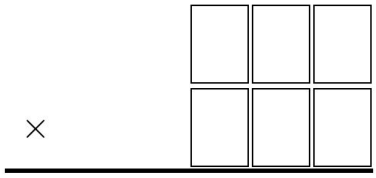
17. Complete the standard multiplication algorithm for 507×827, including any "carried," or regrouped digits, if necessary.



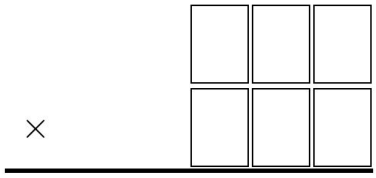
18. Complete the standard multiplication algorithm for 827×965, including any "carried," or regrouped digits, if necessary.



19. Complete the standard multiplication algorithm for 528×209, including any "carried," or regrouped digits, if necessary.



20. Complete the standard multiplication algorithm for 634×865, including any "carried," or regrouped digits, if necessary.



21. What is the least common multiple of 6 and 8?

22. What is the least common multiple of 3, 9, and 12?

23. What is the least common multiple of 3, 4, and 6?

24. What is the least common multiple of 3, 6, and 12?

25. What is the least common multiple of 2, 6, and 10?

26. What is the least common multiple of 8 and 10?

27. Scale the numerator and the denominator down by a factor of 7 (divide) to write a fraction equivalent to $\frac{7}{56}$.

28. Scale the numerator and the denominator down by a factor of 10 (divide) to write a fraction equivalent to $\frac{30}{40}$.

29. Scale the numerator and the denominator down by a factor of 4 (divide) to write a fraction equivalent to $\frac{4}{8}$.

30. Scale the numerator and the denominator down by a factor of 3 (divide) to write a fraction equivalent to $\frac{9}{18}$.

31. Scale the numerator and the denominator up by a factor of 7 (multiply) to write a fraction equivalent to $\frac{1}{8}$.

32. Without dividing, determine if $11{,}504$ is divisible by 4 and explain how you know.

33. Without dividing, determine if $64{,}451$ is divisible by 9 and explain how you know.

34. Without dividing, determine if $30{,}552$ is divisible by 3 and explain how you know.

35. Without dividing, determine if $88{,}938$ is divisible by 6 and explain how you know.

36. Without dividing, determine if $42{,}736$ is divisible by 4 and explain how you know.

37. What is the greatest common factor of 10, 25, and 35?

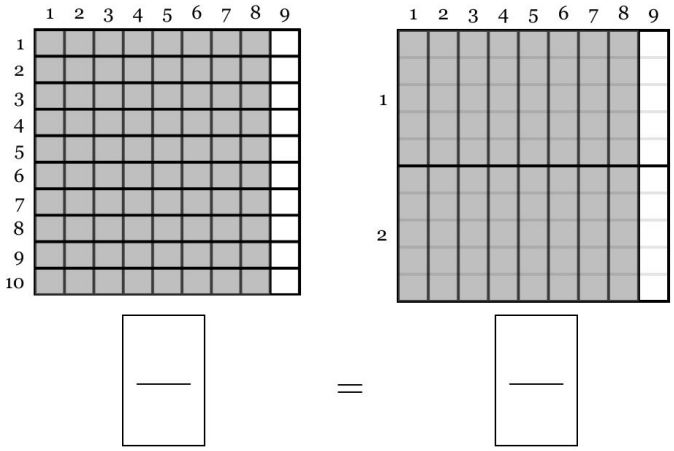
38. What is the greatest common factor of 42 and 28?

39. What is the greatest common factor of 24, 16, and 40?

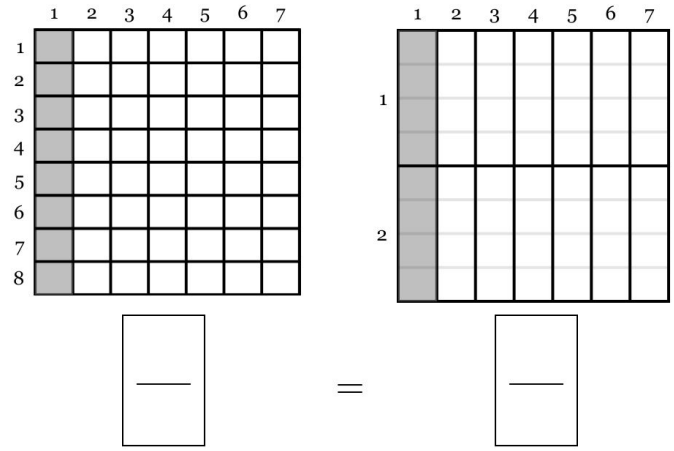
40. What is the greatest common factor of 36 and 6?

41. What is the greatest common factor of 40, 10, and 50?

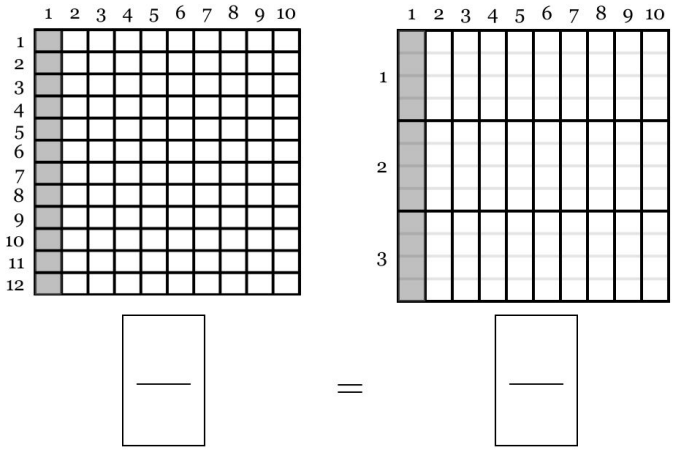
42. The squares below each represent a unit or a whole. For each, write in the box below the fraction represented by the shaded area.



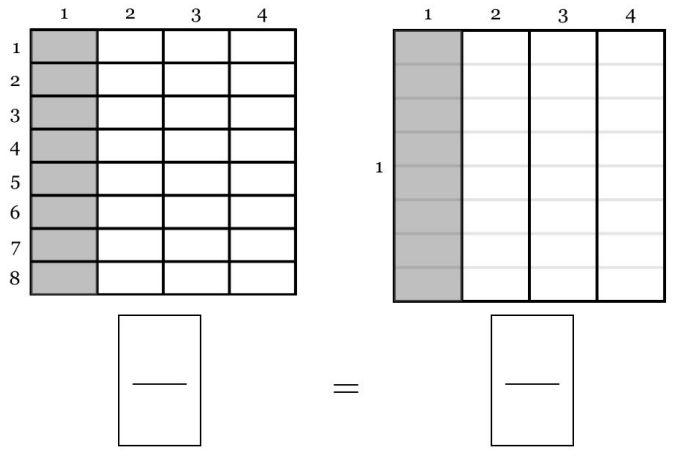
43. The squares below each represent a unit or a whole. For each, write in the box below the fraction represented by the shaded area.



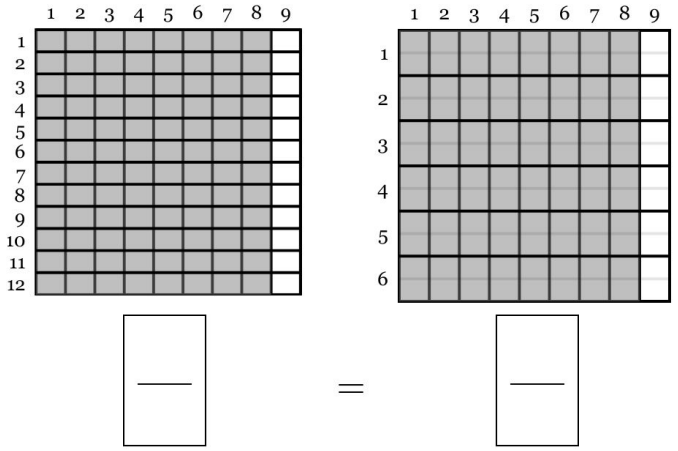
44. The squares below each represent a unit or a whole. For each, write in the box below the fraction represented by the shaded area.



45. The squares below each represent a unit or a whole. For each, write in the box below the fraction represented by the shaded area.



46. The squares below each represent a unit or a whole. For each, write in the box below the fraction represented by the shaded area.



47. Simplify: $\frac{14}{24}$

48. Simplify: $\frac{6}{56}$

49. Simplify: $\frac{15}{70}$

50. Simplify: $\frac{30}{63}$

51. Simplify: $\frac{14}{30}$

52. Convert $\frac{5}{3}$ into a mixed number.

53. Convert $5\frac{2}{5}$ into an improper fraction.

54. Convert $7\frac{5}{7}$ into an improper fraction.

55. Convert $3\frac{9}{10}$ into an improper fraction.

56. Convert $6\frac{7}{8}$ into an improper fraction.

57. Evaluate the expression shown below and write your answer **as a fraction** in simplest form.

$$\frac{5}{9} - \frac{1}{9}$$

58. Evaluate the expression shown below and write your answer **as a fraction** in simplest form.

$$\frac{1}{2} - \frac{7}{16}$$

59. Evaluate the expression shown below and write your answer **as a fraction** in simplest form.

$$\frac{1}{2} - \frac{1}{5}$$

60. Evaluate the expression shown below and write your answer **as a fraction** in simplest form.

$$\frac{7}{8} - \frac{13}{20}$$

61. Evaluate the expression shown below and write your answer **as a fraction** in simplest form.

$$\frac{3}{5} + \frac{6}{25}$$

62. Evaluate the expression shown below and write your answer **as a fraction** in simplest form.

$$\frac{2}{7} - \frac{1}{7}$$

63. Evaluate the expression shown below and write your answer **as a fraction** in simplest form.

$$\frac{1}{2} - \frac{3}{11}$$

64. Perform the operation and reduce the answer fully. Make sure to express your answer as a simplified fraction.

$$\frac{4}{9} \times \frac{7}{10}$$

65. Perform the operation and reduce the answer fully. Make sure to express your answer as a simplified fraction.

$$\frac{3}{5} \div \frac{5}{4}$$

66. Perform the operation and reduce the answer fully. Make sure to express your answer as a simplified fraction.

$$\frac{1}{9} \times 2$$

67. Perform the operation and reduce the answer fully.
Make sure to express your answer as a simplified fraction.

$$\frac{7}{8} \div 7$$

68. Perform the operation and reduce the answer fully.
Make sure to express your answer as a simplified fraction.

$$\frac{3}{7} \div \frac{9}{2}$$

69. Perform the operation and reduce the answer fully.
Make sure to express your answer as a simplified fraction.

$$\frac{3}{2} \times \frac{2}{5}$$

70. Perform the operation and reduce the answer fully.
Make sure to express your answer as a simplified fraction.

$$\frac{2}{5} \div 2$$

71. State your answer as a mixed number in simplest form:

$$5\frac{2}{5} \times \frac{2}{3}$$

State your answer as a mixed number in simplest form.

72. State your answer as a mixed number in simplest form:

$$1\frac{3}{4} \div \frac{1}{3}$$

State your answer as a mixed number in simplest form.

73. State your answer as a mixed number in simplest form:

$$4\frac{7}{9} \times \frac{1}{2}$$

State your answer as a mixed number in simplest form.

74. State your answer as a mixed number in simplest form:

$$1\frac{8}{9} \times \frac{2}{3}$$

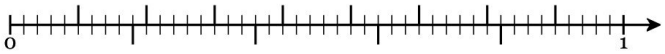
State your answer as a mixed number in simplest form.

75. State your answer as a mixed number in simplest form:

$$4\frac{3}{5} \times \frac{2}{5}$$

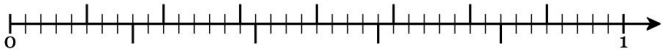
State your answer as a mixed number in simplest form.

76. Use the number line to determine which fraction is larger: $\frac{4}{9}$ or $\frac{2}{5}$. The segment from 0 to 1 has been partitioned into 45 pieces, the smallest number needed to plot both fractions. (a) Plot a fraction equivalent to $\frac{4}{9}$. (b) Plot a fraction equivalent to $\frac{2}{5}$. (c) Complete the sentence below.



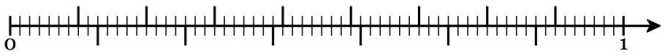
$\frac{4}{9}$ is $\left(\begin{array}{c}\text{greater}\\ \text{less}\end{array}\right)$ than $\frac{2}{5}$ because $\frac{4}{9} = \frac{\square}{45}$ and $\frac{2}{5} = \frac{\square}{45}$

77. Use the number line to determine which fraction is larger: $\frac{5}{8}$ or $\frac{4}{5}$. The segment from 0 to 1 has been partitioned into 40 pieces, the smallest number needed to plot both fractions. (a) Plot a fraction equivalent to $\frac{5}{8}$. (b) Plot a fraction equivalent to $\frac{4}{5}$. (c) Complete the sentence below.



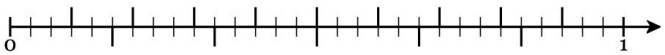
$\frac{5}{8}$ is $\left(\begin{array}{c}\text{greater}\\ \text{less}\end{array}\right)$ than $\frac{4}{5}$ because $\frac{5}{8} = \frac{\square}{40}$ and $\frac{4}{5} = \frac{\square}{40}$

78. Use the number line to determine which fraction is larger: $\frac{4}{9}$ or $\frac{3}{7}$. The segment from 0 to 1 has been partitioned into 63 pieces, the smallest number needed to plot both fractions. (a) Plot a fraction equivalent to $\frac{4}{9}$. (b) Plot a fraction equivalent to $\frac{3}{7}$. (c) Complete the sentence below.



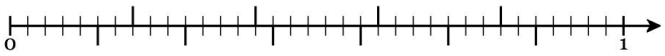
$\frac{4}{9}$ is $\left(\begin{array}{c}\text{greater}\\ \text{less}\end{array}\right)$ than $\frac{3}{7}$ because $\frac{4}{9} = \frac{\square}{63}$ and $\frac{3}{7} = \frac{\square}{63}$

79. Use the number line to determine which fraction is larger: $\frac{3}{10}$ or $\frac{1}{6}$. The segment from 0 to 1 has been partitioned into 30 pieces, the smallest number needed to plot both fractions. (a) Plot a fraction equivalent to $\frac{3}{10}$. (b) Plot a fraction equivalent to $\frac{1}{6}$. (c) Complete the sentence below.



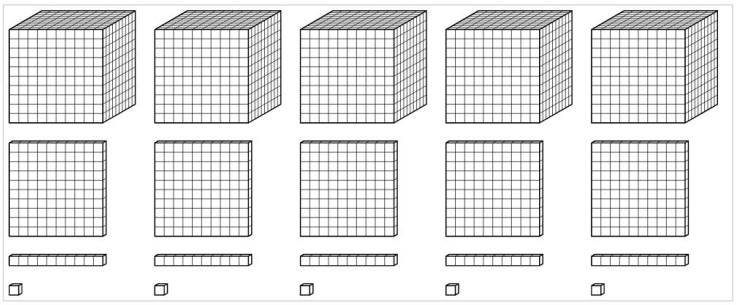
$\frac{3}{10}$ is $\left(\begin{array}{c}\text{greater}\\ \text{less}\end{array}\right)$ than $\frac{1}{6}$ because $\frac{3}{10} = \frac{\square}{30}$ and $\frac{1}{6} = \frac{\square}{30}$

80. Use the number line to determine which fraction is larger: $\frac{3}{5}$ or $\frac{4}{7}$. The segment from 0 to 1 has been partitioned into 35 pieces, the smallest number needed to plot both fractions. (a) Plot a fraction equivalent to $\frac{3}{5}$. (b) Plot a fraction equivalent to $\frac{4}{7}$. (c) Complete the sentence below.

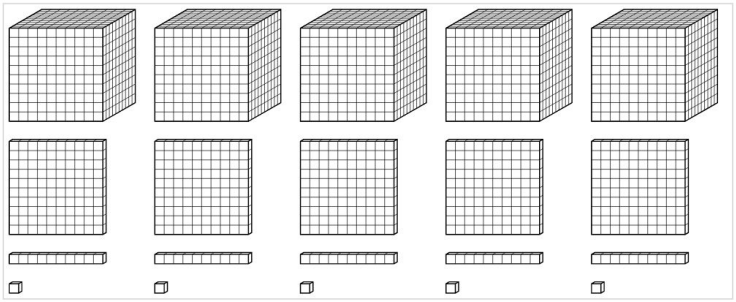


$\frac{3}{5}$ is $\left(\begin{array}{c}\text{greater}\\ \text{less}\end{array}\right)$ than $\frac{4}{7}$ because $\frac{3}{5} = \frac{\square}{35}$ and $\frac{4}{7} = \frac{\square}{35}$

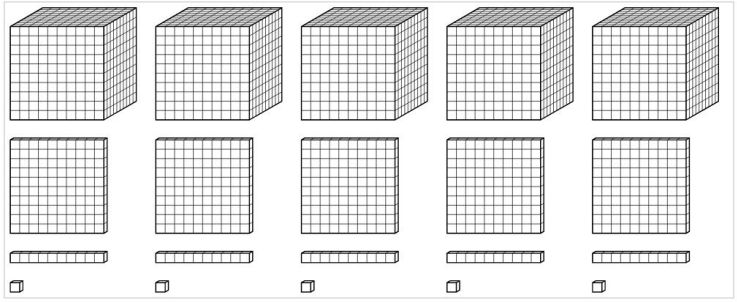
81. Circle the blocks you would need to create a representation of 5.401. The shapes represent 1s, .1s, .01s, and .001s, respectively.



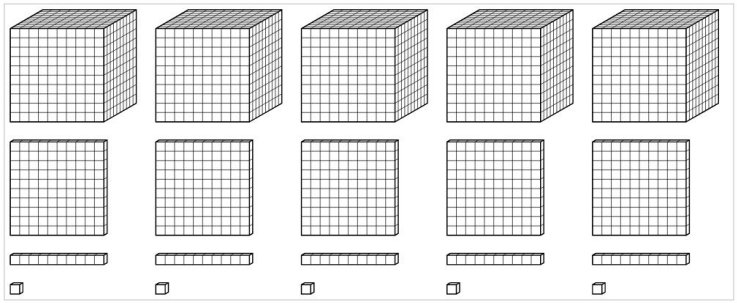
82. Circle the blocks you would need to create a representation of 2.133. The shapes represent 1s, .1s, .01s, and .001s, respectively.



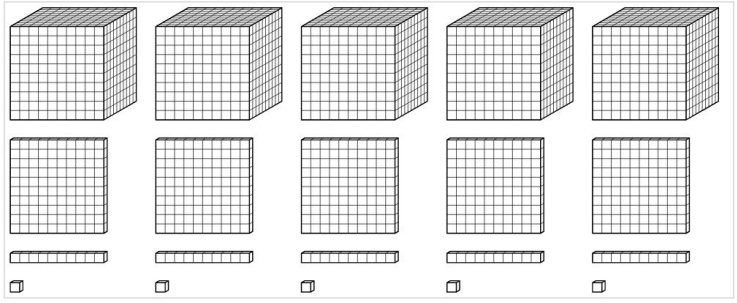
83. Circle the blocks you would need to create a representation of 1.22. The shapes represent 1s, .1s, .01s, and .001s, respectively.



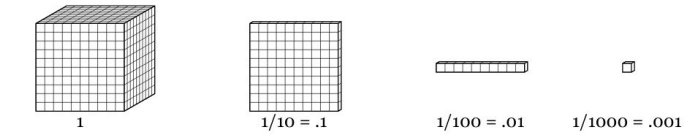
84. Circle the blocks you would need to create a representation of 0.11. The shapes represent 1s, .1s, .01s, and .001s, respectively.

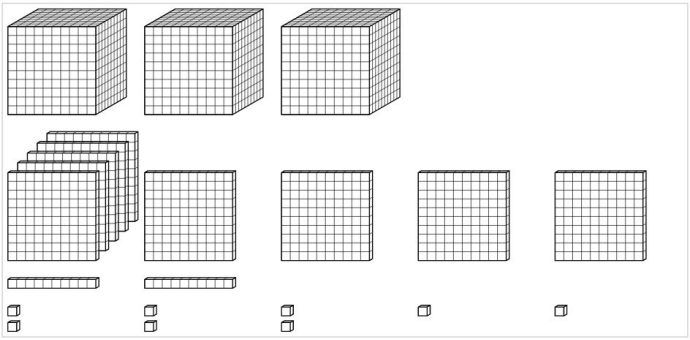


85. Circle the blocks you would need to create a representation of 1.025. The shapes represent 1s, .1s, .01s, and .001s, respectively.

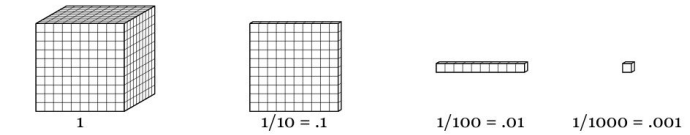


86. What number is represented by the base ten blocks shown below?

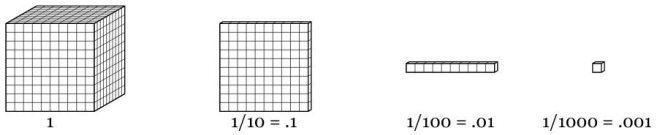


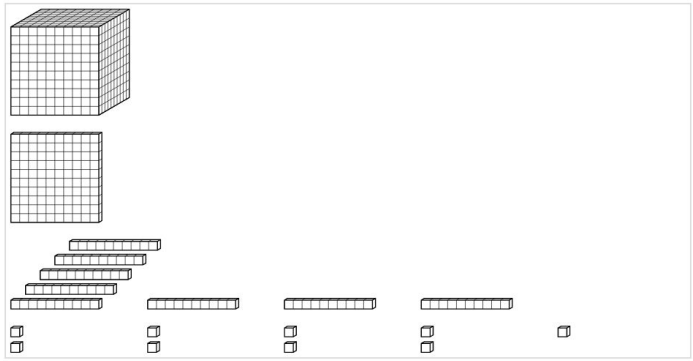


87. What number is represented by the base ten blocks shown below?

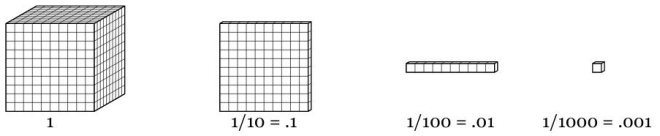


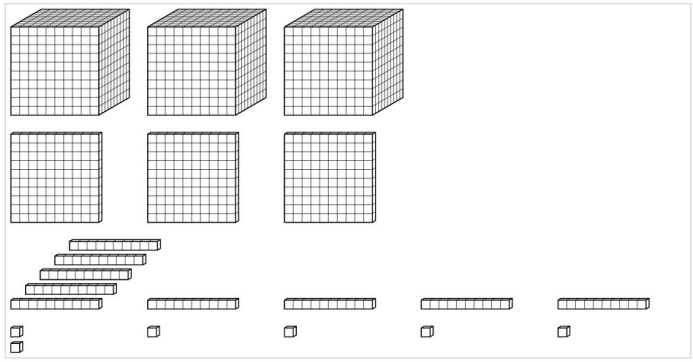
88. What number is represented by the base ten blocks shown below?



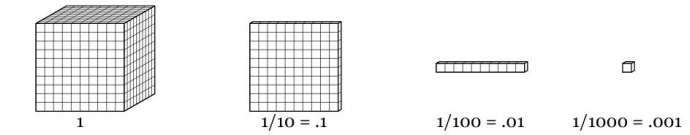


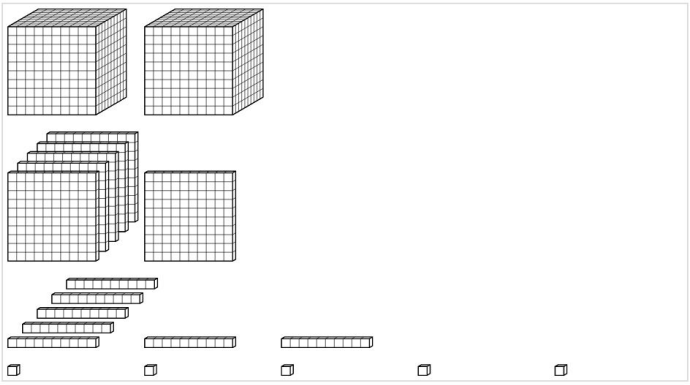
89. What number is represented by the base ten blocks shown below?





90. What number is represented by the base ten blocks shown below?





91. Write the numbers below in order from least to greatest. Use commas to separate.

3.6	3.3	2.3	3.2	1.8	2.8

92. Write the numbers below in order from least to greatest. Use commas to separate.

6.7	6.1	2.5	2.8	3.2	5.7

93. Write the numbers below in order from least to greatest. Use commas to separate.

0.7	3.2	1.4	0.8	2.8	3.1

94. Write the numbers below in order from least to greatest. Use commas to separate.

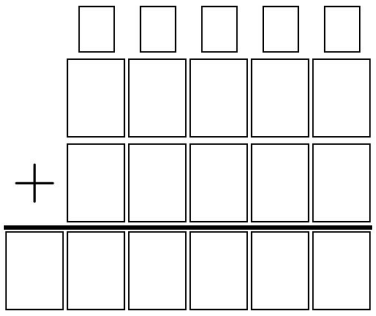
5.8	0.3	0.4	1.3	6.1	5.1

95. Write the numbers below in order from least to greatest. Use commas to separate.

2.6	2.5	4.7	3.4	5.1	4.6

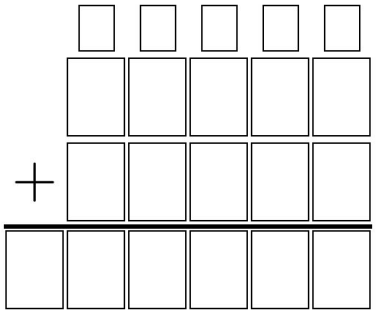
96. Complete the standard algorithm for $25 + 0.62$, including any "carried," or regrouped digits, if necessary.

Note: you may have some boxes "left over." You can leave them empty or fill in "missing" 0's and/or decimal points.



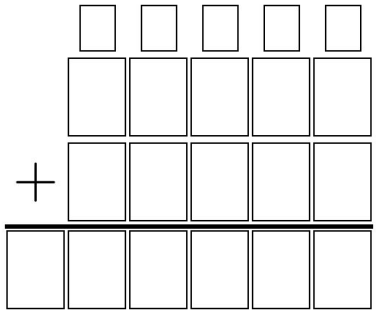
97. Complete the standard algorithm for $36 + 5.6$, including any "carried," or regrouped digits, if necessary.

Note: you may have some boxes "left over." You can leave them empty or fill in "missing" 0's and/or decimal points.



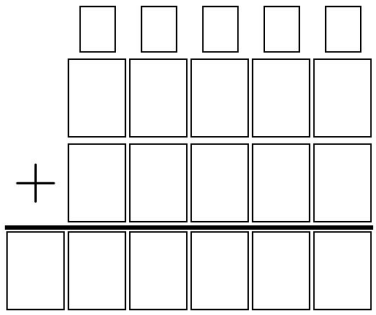
98. Complete the standard algorithm for $3.3 + .73$, including any "carried," or regrouped digits, if necessary.

Note: you may have some boxes "left over." You can leave them empty or fill in "missing" 0's and/or decimal points.



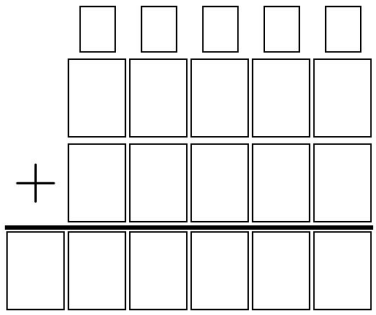
99. Complete the standard algorithm for $4.5 + 2.8$, including any "carried," or regrouped digits, if necessary.

Note: you may have some boxes "left over." You can leave them empty or fill in "missing" 0's and/or decimal points.



100. Complete the standard algorithm for $0.77 + .72$, including any "carried," or regrouped digits, if necessary.

Note: you may have some boxes "left over." You can leave them empty or fill in "missing" 0's and/or decimal points.



101. Evaluate: $900.97 \div 10$

102. Evaluate: 47.69×10

103. Evaluate: $1100.14 \div 10$

104. Evaluate: 117.771×10

105. Evaluate: $1221 \div 10$

106. Fill in the guided sentence below to explain how $.008 \times 5$ relates to 8×5.

$.008$ is _____ (word bank 1) of 8, so

$.008 \times 5$ is _____ (word bank 2) of 8×5.

$8 \times 5 =$ _____ $.008 \times 5 =$ _____

This word bank also applies to questions 107 - 110.

Word bank 1: **(a)** one tenth, **(b)** one hundredth, **(c)** one thousandth

Word bank 2: **(a)** one tenth, **(b)** one hundredth, **(c)** one thousandth

107. Fill in the guided sentence below to explain how $.8 \times 6$ relates to 8×6.

$.8$ is _____ (word bank 1) of 8, so

$.8 \times 6$ is _____ (word bank 2) of 8×6.

$8 \times 6 =$ _____ $.8 \times 6 =$ _____

108. Fill in the guided sentence below to explain how $.005 \times 9$ relates to 5×9.

$.005$ is _____ (word bank 1) of 5, so

$.005 \times 9$ is _____ (word bank 2) of 5×9.

$5 \times 9 =$ _____ $.005 \times 9 =$ _____

109. Fill in the guided sentence below to explain how $.008 \times 3$ relates to 8×3.

$.008$ is _____ (word bank 1) of 8, so

$.008 \times 3$ is _____ (word bank 2) of 8×3.

$8 \times 3 =$ _____ $.008 \times 3 =$ _____

110. Fill in the guided sentence below to explain how $.007 \times 3$ relates to 7×3.

$.007$ is _____ (word bank 1) of 7, so

$.007 \times 3$ is _____ (word bank 2) of 7×3.

$7 \times 3 =$ _____ $.007 \times 3 =$ _____

111. Fill in the guided sentence below to explain how $.6 \times .08$ relates to 6×8.

$.6$ is _____ (word bank 1) of 6, so

$.6 \times 8$ is _____ (word bank 2) of 6×8.

$.08$ is _____ (word bank 3) of 8, so

$.6 \times .08$ is _____ (word bank 4) of $.6 \times 8$.

$6 \times 8 =$ _____ $.6 \times 8 =$ _____

$.6 \times .08 =$ _____

This word bank also applies to questions 112 - 115.

Word bank 1: **(a)** one tenth, **(b)** one hundredth, **(c)** one thousandth

Word bank 2: **(a)** one tenth, **(b)** one hundredth, **(c)** one thousandth

Word bank 3: **(a)** one tenth, **(b)** one hundredth, **(c)** one thousandth

Word bank 4: **(a)** one tenth, **(b)** one hundredth, **(c)** one thousandth

112. Fill in the guided sentence below to explain how $.003 \times .8$ relates to 3×8.

$.003$ is _____ (word bank 1) of 3, so

$.003 \times 8$ is _____ (word bank 2) of 3×8.

$.8$ is _____ (word bank 3) of 8, so

$.003 \times .8$ is _____ (word bank 4) of $.003 \times 8$.

$3 \times 8 =$ _____ $.003 \times 8 =$ _____

$.003 \times .8 =$ _____

113. Fill in the guided sentence below to explain how $.03 \times .05$ relates to 3×5.

$.03$ is _____ (word bank 1) of 3, so

$.03 \times 5$ is _____ (word bank 2) of 3×5.

$.05$ is _____ (word bank 3) of 5, so

$.03 \times .05$ is _____ (word bank 4) of $.03 \times 5$.

$3 \times 5 =$ _____ $.03 \times 5 =$ _____

$.03 \times .05 =$ _____

114. Fill in the guided sentence below to explain how $.002 \times .5$ relates to 2×5.

$.002$ is _____ (word bank 1) of 2, so

$.002 \times 5$ is _____ (word bank 2) of 2×5.

$.5$ is _____ (word bank 3) of 5, so

$.002 \times .5$ is _____ (word bank 4) of $.002 \times 5$.

$2 \times 5 =$ _____ $.002 \times 5 =$ _____

$.002 \times .5 =$ _____

115. Fill in the guided sentence below to explain how $.02 \times .04$ relates to 2×4.

$.02$ is _____ (word bank 1) of 2, so

$.02 \times 4$ is _____ (word bank 2) of 2×4.

$.04$ is _____ (word bank 3) of 4, so

$.02 \times .04$ is _____ (word bank 4) of $.02 \times 4$.

$2 \times 4 =$ _____ $.02 \times 4 =$ _____

$.02 \times .04 =$ _____

116. Complete the standard multiplication algorithm for 9.9×0.05, including any "carried," or regrouped digits, if necessary.

$$\begin{array}{r} 9.9 \\ \times\ 0.0\ 5 \\ \hline \end{array}$$

117. Complete the standard multiplication algorithm for 4.8×5, including any "carried," or regrouped digits, if necessary.

$$\begin{array}{r} 4.8 \\ \times\ \ \ 5 \\ \hline \end{array}$$

118. Complete the standard multiplication algorithm for 8.3×0.7, including any "carried," or regrouped digits, if necessary.

$$\begin{array}{r} 8.3 \\ \times\ 0.7 \\ \hline \end{array}$$

119. Complete the standard multiplication algorithm for 9.9×0.04, including any "carried," or regrouped digits, if necessary.

$$\begin{array}{r} 9.9 \\ \times\ 0.0\ 4 \\ \hline \end{array}$$

120. Complete the standard multiplication algorithm for 7.2×0.7, including any "carried," or regrouped digits, if necessary.

$$\begin{array}{r} 7.2 \\ \times\ 0.7 \\ \hline \end{array}$$

121. Complete the standard multiplication algorithm for 6.3×3.5, including any "carried," or regrouped digits, if necessary.

$$\begin{array}{r} 6.3 \\ \times \quad 3.5 \\ \hline \end{array}$$

122. Complete the standard multiplication algorithm for 65×7.8, including any "carried," or regrouped digits, if necessary.

$$\begin{array}{r} 6\ 5 \\ \times \quad 7.8 \\ \hline \end{array}$$

123. Complete the standard multiplication algorithm for 0.64×0.47, including any "carried," or regrouped digits, if necessary.

$$\begin{array}{r} 0.6\ 4 \\ \times\ 0.4\ 7 \\ \hline \end{array}$$

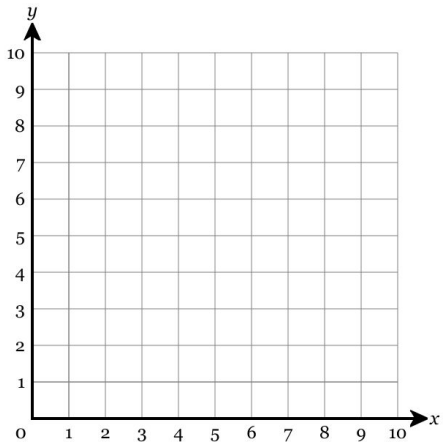
124. Complete the standard multiplication algorithm for 2.9×0.92, including any "carried," or regrouped digits, if necessary.

$$\begin{array}{r} 2.9 \\ \times\ 0.9\ 2 \\ \hline \end{array}$$

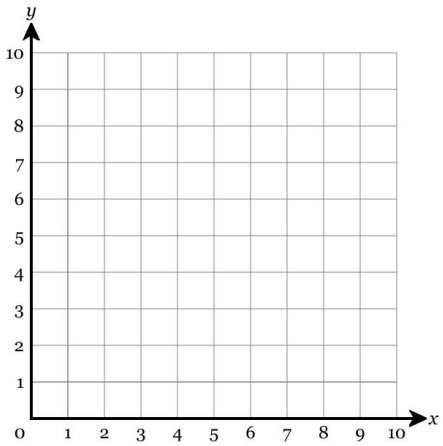
125. Complete the standard multiplication algorithm for 25×0.24, including any "carried," or regrouped digits, if necessary.

$$\begin{array}{r} 2\ 5 \\ \times\ 0.2\ 4 \\ \hline \end{array}$$

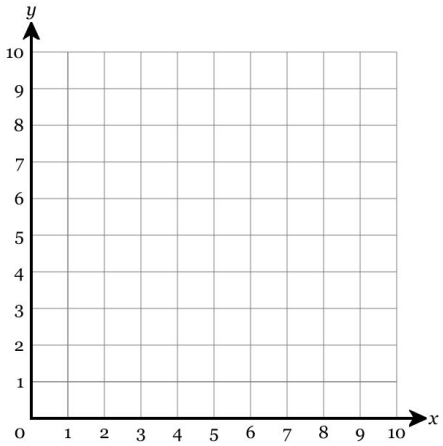
126. Plot the point $(6, 6)$.



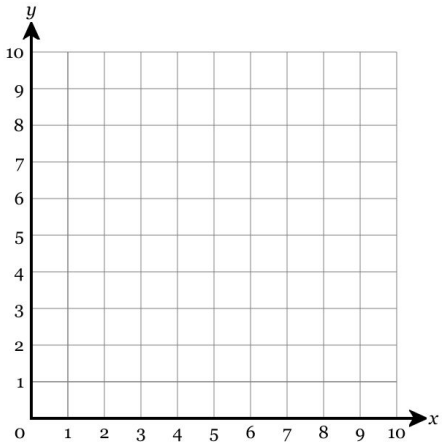
127. Plot the point $(5, 3)$.



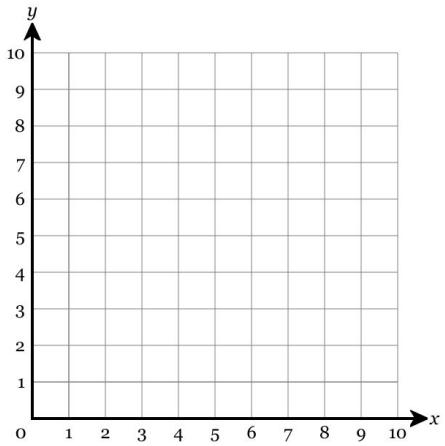
128. Plot the point $(1, 2)$.



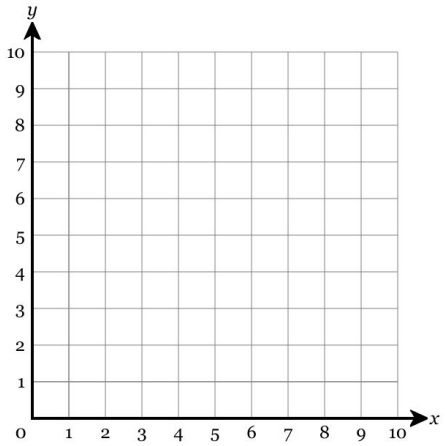
129. Plot the point $(10, 2)$.



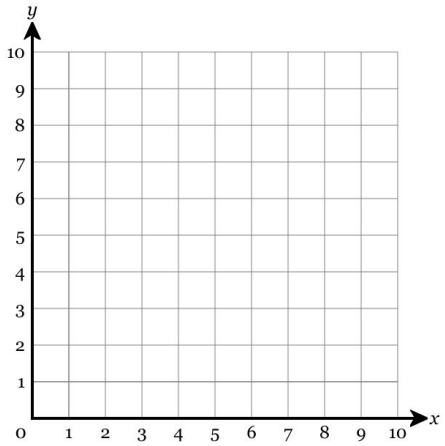
130. Plot the point $(4, 0)$.



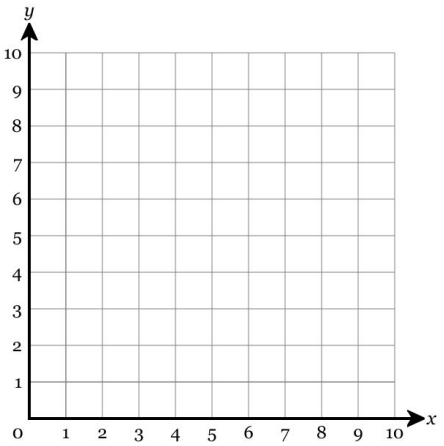
131. Plot the point $(5, 2)$.



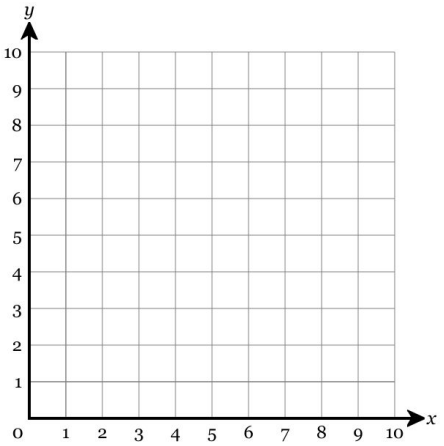
132. Plot the point $(3, 5)$.



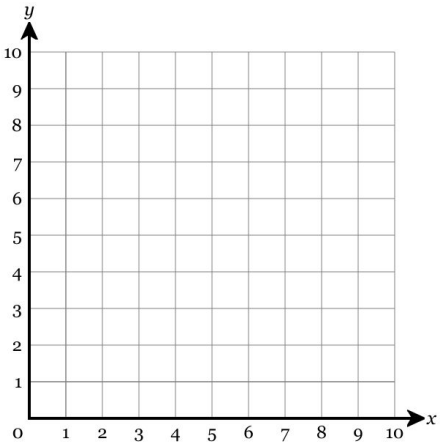
133. Plot the point $(2, 2)$.



134. Plot the point $(9, 1)$.



135. Plot the point $(0, 6)$.



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