

Understanding fractions worksheet. Professor Luis Fernández

Each box represents the whole (that is, 1). Write the fraction represented by the shaded region.

1.  = $\frac{3}{5}$ (example)

2.  = $\frac{\quad}{\quad}$


3.  = $\frac{\quad}{\quad}$

4.  = $\frac{\quad}{\quad}$

5.  = $\frac{\quad}{\quad}$

6.  = $\frac{\quad}{\quad}$

7.  = $\frac{\quad}{\quad}$

8.  = $\frac{\quad}{\quad}$

9.  = $\frac{\quad}{\quad}$

10.  = $\frac{\quad}{\quad}$

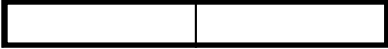
11.  = $\frac{\quad}{\quad}$


12.  = $\frac{\quad}{\quad}$


13.  = $\frac{\quad}{\quad}$


14.  = $\frac{\quad}{\quad}$


Represent the given fraction as a part of the whole, shading the corresponding part. The whole is already divided into parts in this exercise.


15.  = $\frac{1}{2}$

16.  = $\frac{2}{3}$


17.  = $\frac{4}{6}$


18.  = $\frac{1}{2}$


19.  = $\frac{5}{7}$


20.  = $\frac{2}{5}$


Represent the given fraction as a part of the whole, shading the corresponding part. **You need to divide the whole first into the corresponding number of equal parts.** The number of parts is equal to the denominator.


21.  = $\frac{1}{3}$

22.  = $\frac{4}{5}$

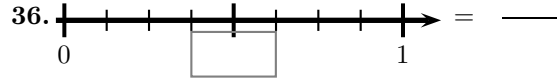
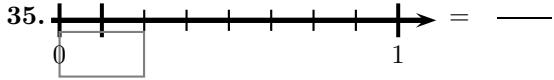
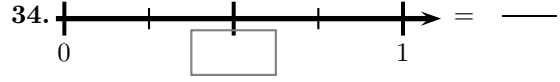
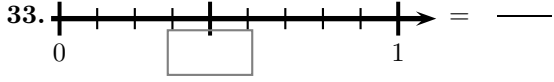
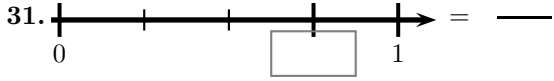
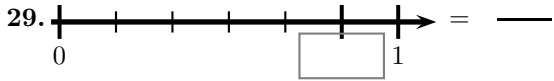
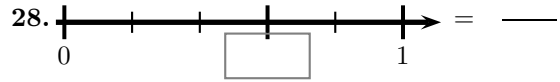
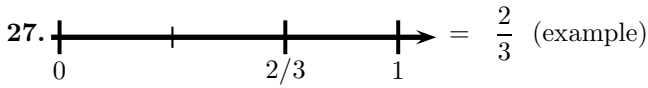
23.  = $\frac{1}{3}$

24.  = $\frac{4}{5}$

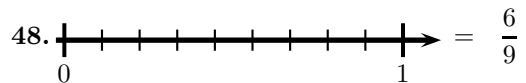
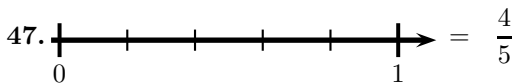
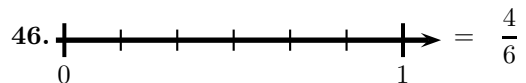
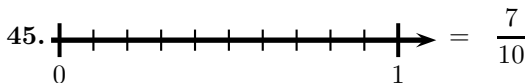
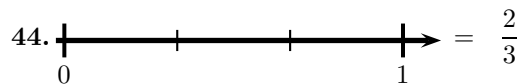
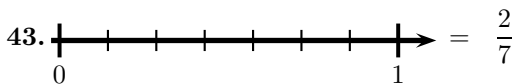
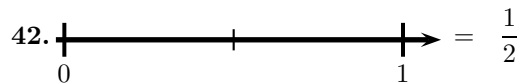
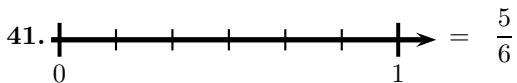
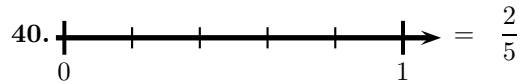
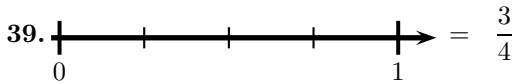
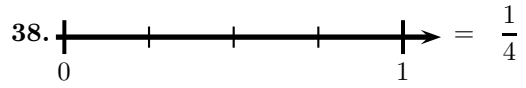
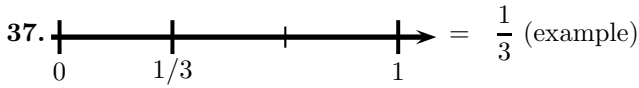
25.  = $\frac{1}{3}$

26.  = $\frac{4}{5}$

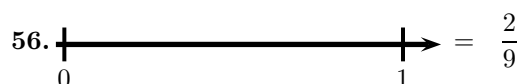
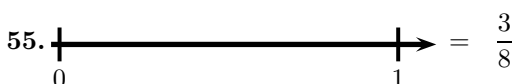
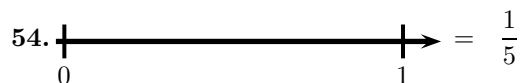
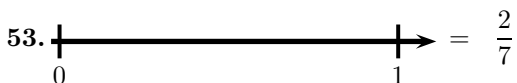
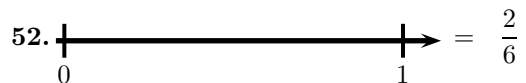
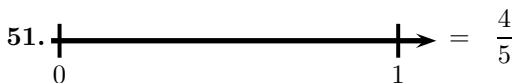
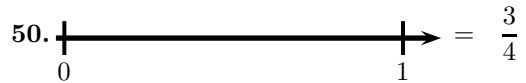
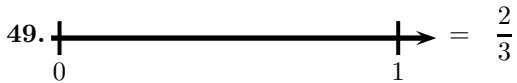
For the point given in the number line, write the fraction it represents.



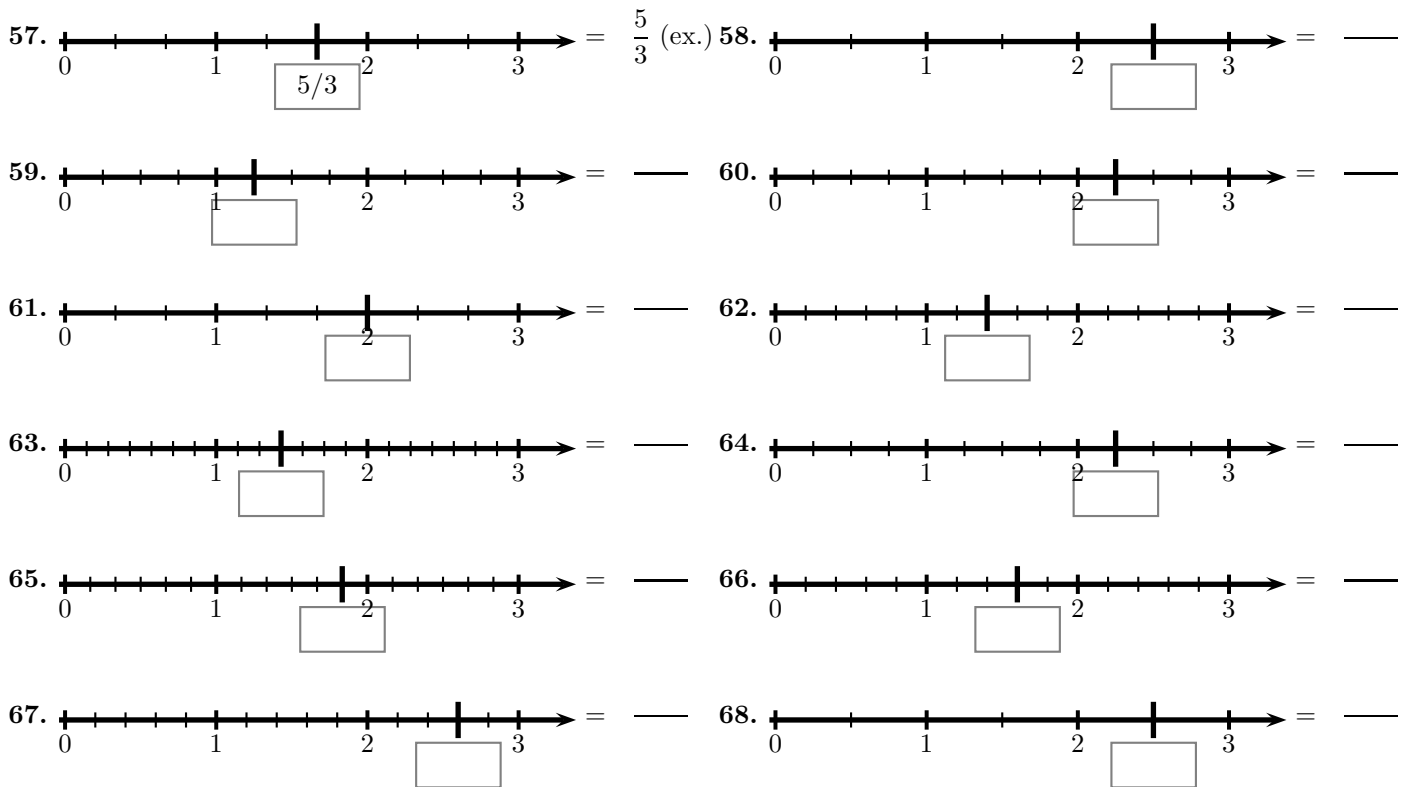
Represent the given fraction as a point in the real line between 0 and 1. The necessary divisions of the line are given in this exercise.



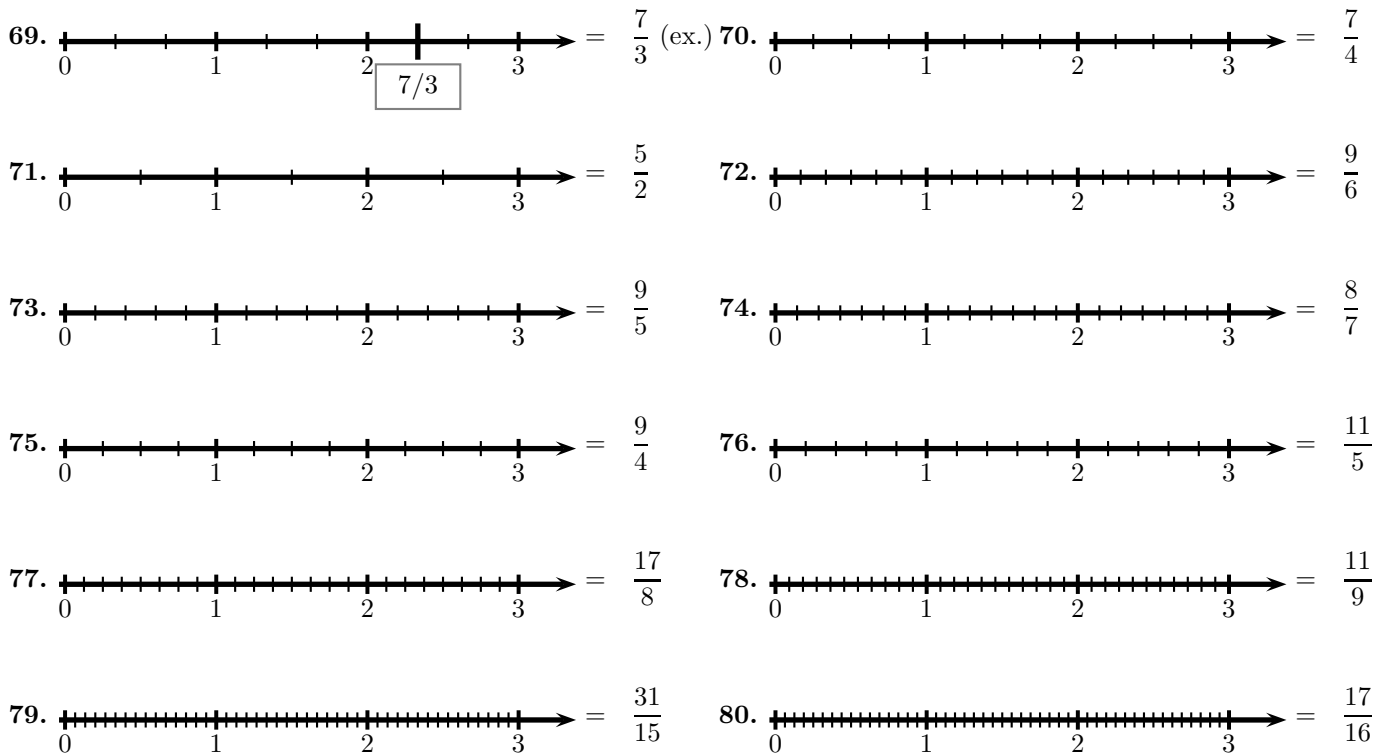
Represent the given fraction as a point in the real line between 0 and 1. **First you have to do the divisions of the line into the number of equal parts you need.** The number of divisions is equal to the denominator.



For the point given in the number line, write the fraction it represents.



Represent the given fraction as a point in the real line. The necessary divisions of the line are given in this exercise.



Mixed numbers

Remember: To write an improper fraction as a mixed number, divide:

$$\text{numerator} \div \text{denominator},$$

and then write

$$\frac{\text{numerator}}{\text{denominator}} = \text{quotient} + \frac{\text{remainder}}{\text{denominator}}.$$

For example, $\frac{15}{7} = 2 + \frac{1}{7}$.

Note that normally one does not write the '+' between the fraction and the number (which is unfortunate, but it is the common way). So one would write $2\frac{1}{7}$ instead of $2 + \frac{1}{7}$.

Convert the following fractions to mixed numbers. If the fraction is proper (that is, if the numerator is less than the denominator), then the fraction is already written as a mixed number.

81. $\frac{7}{3} = 2 + \frac{1}{3}$ (example)

82. $\frac{17}{16} =$

83. $\frac{5}{2} =$

84. $\frac{31}{15} =$

85. $\frac{8}{3} =$

86. $\frac{5}{7} =$

87. $\frac{11}{4} =$

88. $\frac{13}{5} =$

89. $\frac{9}{3} =$

90. $\frac{17}{4} =$

91. $\frac{15}{7} =$

92. $\frac{19}{8} =$

93. $\frac{25}{3} =$

94. $\frac{17}{5} =$

95. $\frac{32}{12} =$

Remember: To write a mixed number as an improper fraction, multiply the whole number part by the denominator, add the numerator, and write the result as the numerator of the fraction, leaving the same denominator. In symbols:

$$N\frac{p}{q} = \frac{N \cdot q + p}{q}.$$

For example, $3\frac{1}{4} = \frac{3 \cdot 4 + 1}{4} = \frac{13}{4}$.

Convert the following mixed numbers to fractions.

96. $2\frac{4}{5} = \frac{14}{5}$ (example)

97. $3\frac{1}{2} =$

98. $5\frac{1}{3} =$

99. $2\frac{3}{5} =$

100. $5\frac{3}{4} =$

101. $3\frac{5}{6} =$

102. $1\frac{1}{3} =$

103. $2\frac{7}{8} =$

104. $12\frac{2}{3} =$

105. $24\frac{1}{2} =$

106. $6\frac{5}{7} =$

107. $9\frac{3}{4} =$