

Lecture Notes

Notes

- The **numerator** of a fraction is the **top** number.
- The **denominator** of a fraction is the **bottom** number.
- The **fraction bar** is really a **division bar**.
 - A fraction represents division, where the numerator (dividend) is being divided by the denominator (divisor).
- A **proper fraction** has a **smaller numerator** than its denominator.
- An **improper fraction** has the **same or larger numerator** than its denominator.
- Although you should know the difference between a proper and improper fraction, there are many times when we accept fractions in their improper form. But of course, it depends on the question being asked and the format of the answer that is expected.

Identify the numerator and denominator of the following number.

$$\frac{9}{10}$$

Find the proper and improper fractions in the following list.

$$\frac{5}{2}, \frac{9}{11}, \frac{16}{9}, \frac{14}{14}, \frac{2}{3}, \frac{11}{13}$$

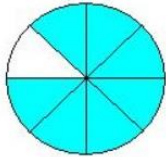
Which answer below contains all of the improper fractions from the given list?

- A. $\frac{5}{2}, \frac{16}{9}, \frac{11}{13}$
- B. $\frac{9}{11}, \frac{2}{3}, \frac{11}{13}$
- C. $\frac{5}{2}, \frac{16}{9}$
- D. $\frac{5}{2}, \frac{16}{9}, \frac{14}{14}$

Which answer below contains all of the proper fractions from the given list?

- A. $\frac{5}{2}, \frac{16}{9}, \frac{11}{13}$
- B. $\frac{9}{11}, \frac{2}{3}, \frac{11}{13}$
- C. $\frac{5}{2}, \frac{16}{9}, \frac{14}{14}$
- D. $\frac{9}{11}, \frac{11}{13}$

Write the fractions that represent the shaded and unshaded portions of the figure.



The fraction that represents the shaded portions of the figure is $\frac{7}{8}$.

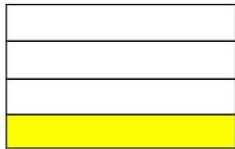
(Type a whole number, proper fraction, or improper fraction.)

The fraction that represents the unshaded portions of the figure is $\frac{1}{8}$.

(Type a whole number, proper fraction, or improper fraction.)

- A useful way to think of a fraction is **Part / Whole** (or Part \div Whole).
- The **part** is the **numerator**.
- The **whole** is the **denominator**.
- When adding the fractions of the shaded and unshaded portions of the graphic, the result is **1**.
 - $\frac{7}{8} + \frac{1}{8} = \frac{8}{8} = 1$
 - You can also think of 1 as 100%.

Write the fractions that represent the shaded and unshaded portions of the figure.



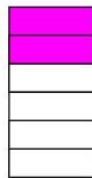
The fraction that represents the shaded portions of the figure is $\frac{1}{4}$.

(Type a whole number, proper fraction, or improper fraction.)

The fraction that represents the unshaded portions of the figure is $\frac{3}{4}$.

(Type a whole number, proper fraction, or improper fraction.)

Write the fractions that represent the shaded and unshaded portions of the figure.



The fraction that represents the shaded portions of the figure is $\frac{2}{6}$.

(Type a whole number, proper fraction, or improper fraction.)

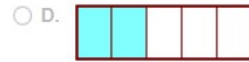
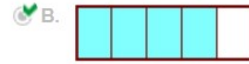
The fraction that represents the unshaded portions of the figure is $\frac{4}{6}$.

(Type a whole number, proper fraction, or improper fraction.)

Draw and shade a part of a diagram to represent the fraction.

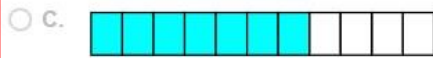
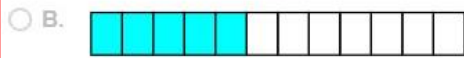
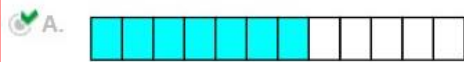
$\frac{4}{5}$ of a diagram

Which shaded region below represents $\frac{4}{5}$?



Draw a sketch to illustrate the fractional part $\frac{7}{12}$.

Choose the correct sketch below.



E. None of the above.