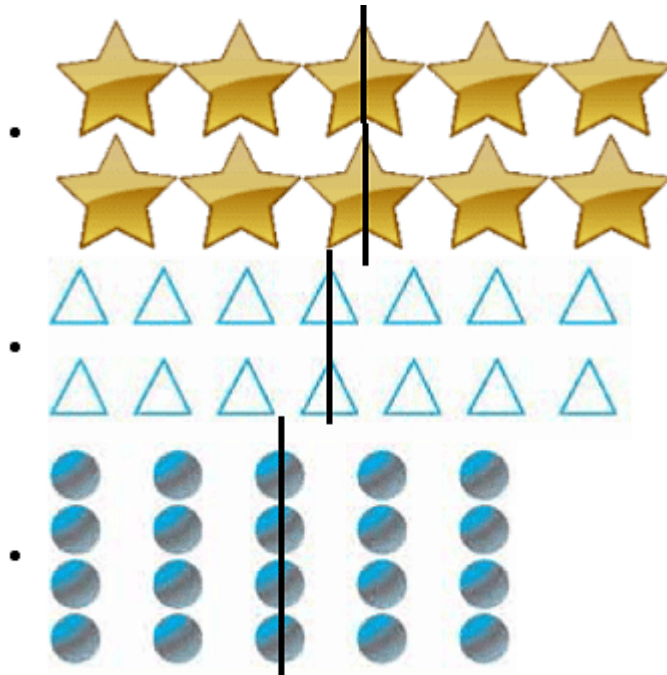


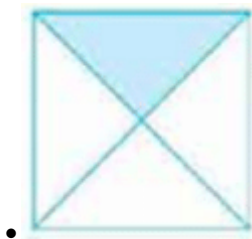
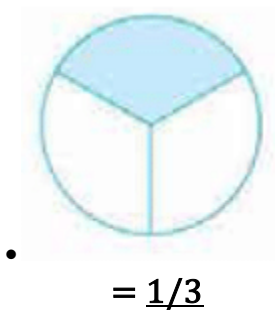
Worksheet

Fractions

Question 1: Divide each collection into two equal parts by dotted lines:



Question 2: In each of the following write the fraction representing the shaded portion:



$$= \underline{\frac{1}{4}}$$



$$= \underline{\frac{1}{3}}$$

Question 3: Write the fraction whose

- Numerator is 7 and denominator is 15.
- Numerator is 22 and denominator is 35.

Answer :

- $\frac{7}{15}$
- $\frac{22}{35}$

Question 4: Divide each collection into suitable number of equal parts and fill in the blanks:



$$\frac{1}{2} \text{ of } 8 = \underline{4}$$

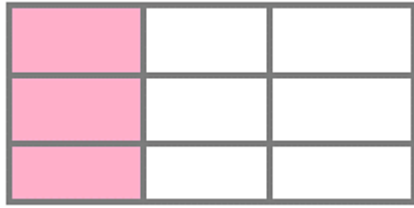


$$\frac{1}{8} \text{ of } 16 = \underline{2}$$

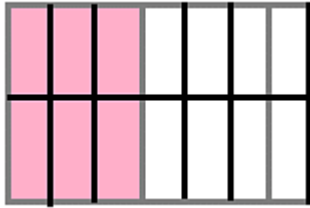


$$\frac{5}{6} \text{ of } 18 = \underline{15}$$

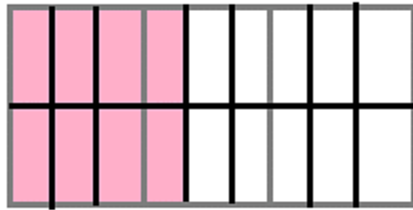
Question 5: Draw a collection of objects. Divide the collection into suitable number of equal parts and find:



Answer : $\frac{1}{3}$ of 9 = 3



Answer : $\frac{3}{7}$ of 14 = 6



Answer : $\frac{4}{9}$ of 18 = 8

Question 6: Write the next three equivalent fractions of each of the following

- $\frac{1}{4}, \frac{2}{8}, \frac{4}{16}, \frac{8}{32}$
- $\frac{2}{3}, \frac{4}{6}, \frac{8}{12}, \frac{16}{24}$
- $\frac{5}{9}, \frac{10}{18}, \frac{20}{36}, \frac{40}{72}$
- $\frac{4}{7}, \frac{8}{14}, \frac{16}{28}, \frac{32}{56}$

Question 7: Fill in the missing numerators to make the statement true:

- $\frac{3}{4} = \frac{15}{20}$
- $\frac{5}{9} = \frac{30}{54}$
- $\frac{1}{3} = \frac{5}{15}$

Question 8: Find an equivalent fraction of $\frac{3}{4}$ with:

- Equivalent fraction of $\frac{3}{4}$ with numerator 15: $(\frac{3}{4}) \times (\frac{5}{5}) = \frac{15}{20}$.
- Equivalent fraction of $\frac{3}{4}$ with denominator 48: $(\frac{3}{4}) \times (\frac{12}{12}) = \frac{36}{48}$.
- Equivalent fraction of $\frac{3}{4}$ with denominator 24: $(\frac{3}{4}) \times (\frac{6}{6}) = \frac{18}{24}$.

Question 9: Fill in the missing denominators to make the statement true:

$$\frac{5}{7} = \frac{15}{21}$$

$$\frac{4}{9} = \frac{28}{63}$$

$$\frac{3}{5} = \frac{24}{40}$$

Question 10: Check whether the given fractions are equivalent:

- $\frac{3}{15}, \frac{1}{5}$
 $\frac{3}{15}$ in the simplest form is $\frac{1}{5}$, thus equivalent.
- $\frac{2}{11}, \frac{6}{21}$
 $\frac{6}{21}$ in the simplest form is $\frac{2}{7}$, thus not equivalent.
- $\frac{4}{9}, \frac{8}{18}$
 $\frac{8}{18}$ in the simplest form is $\frac{4}{9}$, thus equivalent.

Question 11: State whether the fraction is in its lowest terms or not:

- $\frac{12}{20}$ - NO
The simplest form of $\frac{12}{20}$ is $\frac{3}{5}$.
- $\frac{4}{6}$ - NO
The simplest form of $\frac{4}{6}$ is $\frac{2}{3}$.

- **80/81** - YES

The simplest form of 80/81 is 80/81 itself.

Question 12: Reduce to the lowest terms :

- **21/28**

The simplest form of 21/28 is 3/4.

- **45/60**

The simplest form of 45/60 is 3/4.

- **36/54**

The simplest form of 36/54 is 2/3.

Question 13: Encircle the fraction which is in its lowest terms:

- $\frac{4}{5}, \frac{12}{15}, \frac{40}{50}, \frac{16}{20}$
- $\frac{9}{42}, \frac{12}{56}, \frac{8}{45}, \frac{27}{135}$

Question 14: Fill in the blanks by putting > or < in each of the following to make the statement true:

- $\frac{15}{19} > \frac{12}{19}$
- $\frac{3}{20} < \frac{7}{20}$
- $\frac{21}{22} > \frac{19}{22}$

Question 15: Which is smaller in each of the following pairs of fractions?

- **3/16, 21/32**

We need to make the denominator equal first,

$$3/16 \times 2/2 = 6/32$$

$$6/32 < 21/32$$

- **18/25, 2/5**

We need to make the denominator equal first,

$$2/5 \times 5/5 = 10/25$$

$$18/25 > 10/25$$

• **8/21, 7/20**

We need to make the denominator equal first,

$$\text{LCM} = 420$$

$$8/21 \times 20/20 = 160/420$$

$$7/20 \times 21/21 = 147/420$$

Question 16: Using the figures, fill in the blanks:

•  $\frac{1}{5} + \frac{2}{5} = \frac{\underline{1} + \underline{2}}{5} = \frac{\underline{3}}{5}$

•  $\frac{2}{7} + \frac{4}{7} = \frac{\underline{2} + \underline{4}}{7} = \frac{\underline{6}}{7}$

•  $\frac{2}{13} + \frac{3}{13} + \frac{5}{13} = \frac{\underline{2} + \underline{3} + \underline{5}}{13} = \frac{\underline{10}}{13}$

Question 17: Find the sum:

• $1/8 + 2/8 + 3/8 = 6/8$

• $1/13 + 3/13 + 8/13 = 12/13$

• $9/35 + 2/35 + 11/35 = 22/35$

Question 18: Which of the following is a set of like fractions?

• $\frac{1}{7}, \frac{5}{7}, \frac{3}{7}, \frac{11}{7}$

• $\frac{2}{15}, \frac{4}{15}, \frac{11}{15}, \frac{7}{15}$

• Both are like fractions as the denominator in both sets is the same.

Question 19: Write the fractions whose numerator is 6 and denominator is 19.

Answer : 6/19

Question 20:

$$\frac{1}{7} + \frac{2}{7} + \frac{4}{7} = \frac{\underline{1+2+4}}{7} = \underline{1}.$$