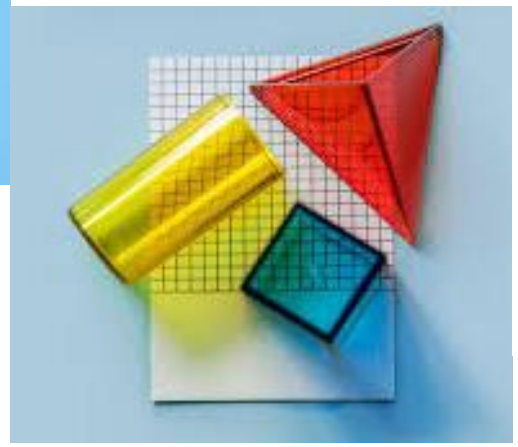
Project code:
2019-1-EL01-KA201-062914

Erasmus+ Call: 2019 - KA2 -



3D printing technology aims students understanding maths and recycling procedure

O2_1st Curricula of Maths: Fractions

Mutiltiply fractions

Outline

- Mutiply Fractions
- To Remember ….
- Activities
- Videos

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MULTIPLY and DIVIDE FRACTIONS

There are 3 simple steps to **multiply** fractions.

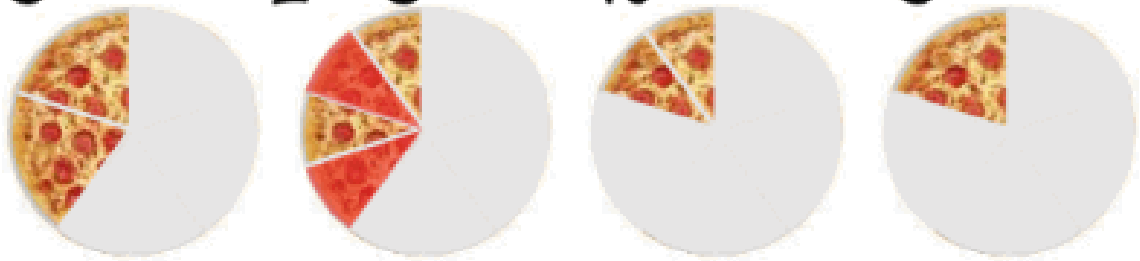
1. Multiply the numerators.
2. Multiply the denominators.
3. **Simpify** the fraction if needed.

Students Print

- ✓ 1 circle
- ✓ 5 equal parts of the circle
- ✓ 10 equal parts of the circle

Example

$\frac{2}{5}$ $\frac{1}{2} \times \frac{2}{5}$ $\frac{2}{10}$ $\frac{1}{5}$



Do you see that half of two-fifths is two-tenths?

Do you also see that two-tenths is simpler as one-fifth?

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To multiply fractions with whole numbers..

1. Make the whole number a fraction, by putting it over 1.

2. Multiply the two fractions.

To multiply mixed fractions..

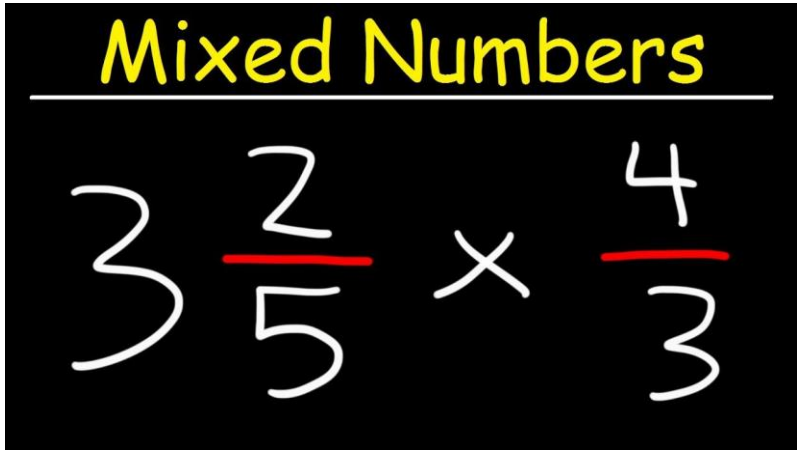
1. Converrt mixed fractions into improper fractions.

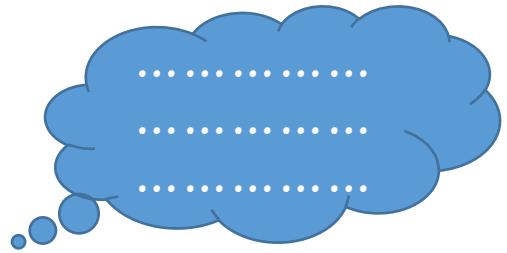
2. Multiply the two fractions.

Example

a. $7 \times \frac{2}{5} = \frac{14}{5} = 2\frac{4}{5}$

b. $1\frac{1}{2} \times 2\frac{1}{5} = \frac{3}{2} \times \frac{11}{5} = \frac{33}{10} = 3\frac{3}{10}$





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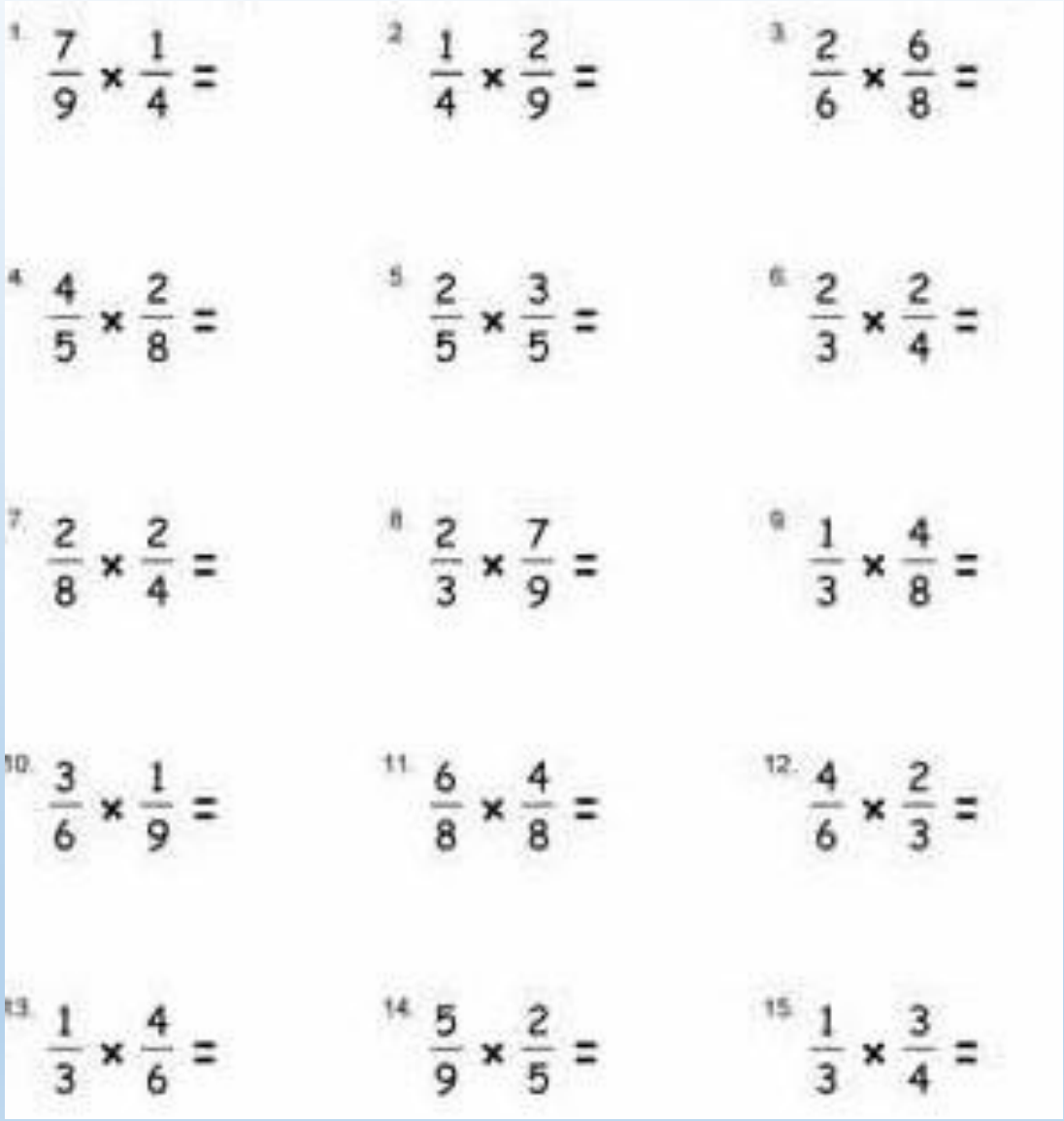
ACTIVITY 1

Multiply the fractions

and simplify the result.



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ACTIVITY 2

Find the missing number.

1. $\frac{1}{2} \times 4 = \square$
2. $9 \times \frac{2}{3} = \square$
3. $\frac{7}{2} \times 8 = \square$
4. $\square \times \frac{3}{14} = \frac{3}{2}$
5. $\square \times 10 = \frac{2}{3}$
6. $\square \times 5 = \frac{15}{8}$
7. $\frac{1}{6} \times \square = 3$
8. $44 \times \square = 4$
9. $12 \times \square = \frac{4}{7}$
10. $\square \times \frac{7}{6} = 21$
11. $\square \times 24 = 16$
12. $\square \times \frac{3}{4} = \frac{45}{2}$

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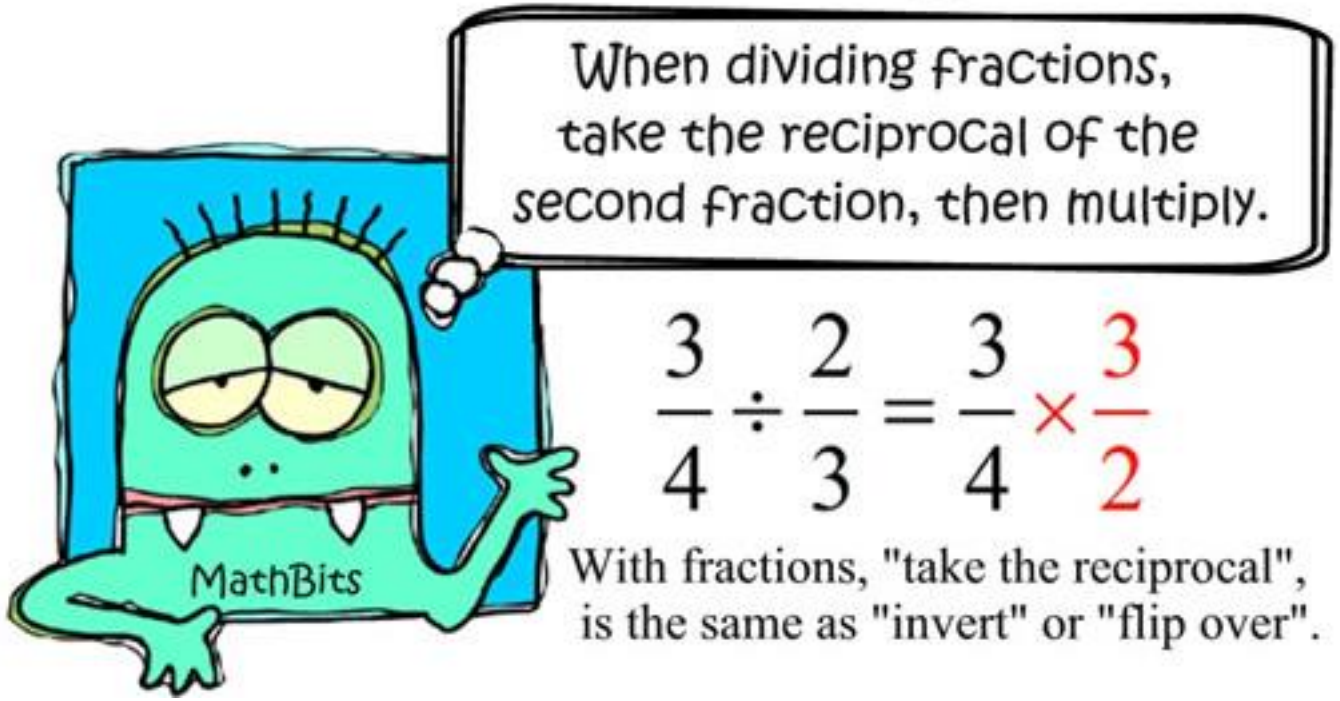
RULE for Dividing Fractions



$$\frac{3}{4} \div \frac{2}{3} = \frac{3}{4} \times \frac{3}{2}$$

With fractions, "take the reciprocal", is the same as "invert" or "flip over".

Example

a. $\frac{2}{7} \div \frac{3}{5} = \frac{2}{7} \times \frac{5}{3} = \frac{10}{21}$

b. $\frac{1}{2} \div 4 = \frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$

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ACTIVITY 3

Multiply / divide the fractions and simplify the result.

1. $\frac{1}{2} \times \frac{5}{4}$
2. $\frac{1}{6} \div \frac{8}{11}$
3. $\frac{1}{3} \div \frac{13}{9}$
4. $\frac{13}{4} \div \frac{1}{2}$
5. $\frac{17}{6} \div \frac{3}{5}$
6. $\frac{1}{4} \times \frac{5}{3}$
7. $\frac{11}{2} \div \frac{1}{2}$
8. $\frac{4}{3} \div \frac{11}{12}$
9. $\frac{1}{3} \times \frac{20}{9}$
10. $\frac{13}{7} \times \frac{14}{11}$
11. $\frac{10}{3} \times \frac{11}{6}$
12. $\frac{1}{2} \div \frac{1}{2}$
13. $\frac{14}{9} \times \frac{7}{10}$
14. $\frac{15}{8} \times \frac{7}{6}$
15. $\frac{3}{2} \div \frac{4}{9}$

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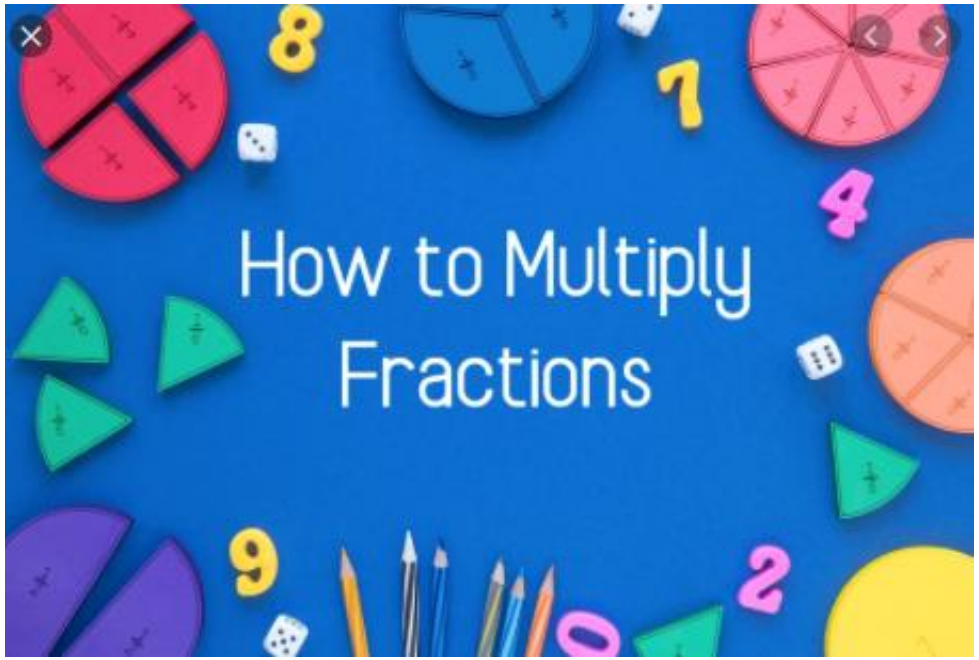
Videos



- https://www.youtube.com/watch?v=LU3R2JE5c_U
- https://www.youtube.com/watch?v=x6xtezhuCZ4
- https://www.youtube.com/watch?v=ltKaGC8fd4

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