

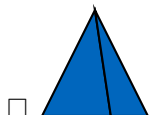
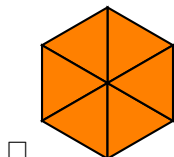
FRACTIONS

A DEFINITIONS

A.1 DETERMINING IF EQUAL PARTS

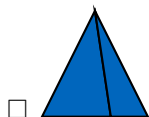
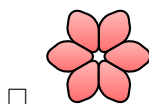
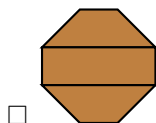
MCQ 1: Which figures are divided into equal parts?

Choose all the correct answers:

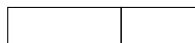


MCQ 2: Which figures are divided into equal parts?

Choose all the correct answers:



MCQ 3: Louis has a cake that he wants to share with his brother Hugo. He decides to cut the cake into two parts:



Louis picks one of the two parts.



Louis says: "I chose 1 out of the 2 parts. So, I have $\frac{1}{2}$ of the cake, and you have $\frac{1}{2}$ of the cake! It's fair." Do you agree with Louis?

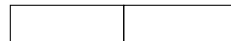
Choose one answer:

☐ Yes

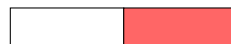
☐ No

MCQ 4: Louis and Hugo have a cake. Their father explains the fair way to share: "One of you cuts the cake into two pieces, and the other one gets to choose his piece first."

Following their father's advice, Louis cuts the cake into two equal parts:



After Louis cuts the cake, Hugo chooses one of the two parts.



Hugo says: "I chose one of the two equal parts. So, I have $\frac{1}{2}$ of the cake and you, Louis, also have $\frac{1}{2}$ of the cake! It's fair." Do you agree with Hugo?

Choose one answer:

☐ Yes

☐ No

A.2 FINDING FRACTIONS

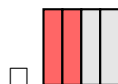
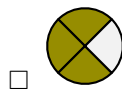
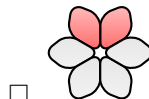
MCQ 5: Which shapes have $\frac{2}{3}$ of their area shaded?

Choose all the correct answers:



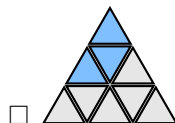
MCQ 6: Which shapes have $\frac{2}{4}$ of their area shaded?

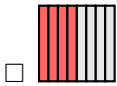
Choose all the correct answers:



MCQ 7: Which shapes have $\frac{3}{8}$ of their area shaded?

Choose all answers:



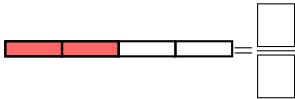


MCQ 8: Which shapes have $\frac{2}{4}$ of their area shaded?
Choose all answers:

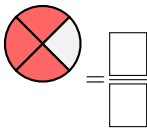


A.3 FINDING FRACTIONS IN DIAGRAMS

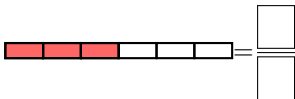
Ex 9: Find the fraction of the area of the shape that is shaded:



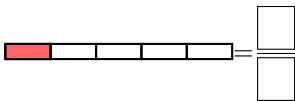
Ex 10: Find the fraction of the area of the shape that is shaded:



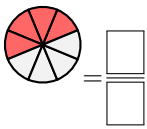
Ex 11: Find the fraction of the area of the shape that is shaded:



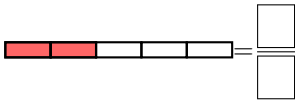
Ex 12: Find the fraction of the area of the shape that is shaded:



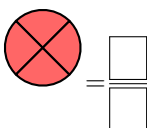
Ex 13: Find the fraction of the area of the shape that is shaded:



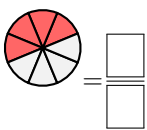
Ex 14: Find the fraction of the area of the shape that is shaded:



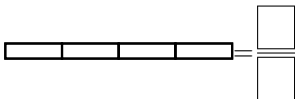
Ex 15: Find the fraction of the area of the shape that is shaded:



Ex 16: Find the fraction of the area of the shape that is shaded:



Ex 17: Find the fraction of the area of the shape that is shaded:



A.4 FINDING FRACTIONS IN WORD PROBLEMS

Ex 18: Hugo eats 3 parts of a cake that is divided into 4 equal parts. What fraction of the cake does Hugo eat?

of the cake

Ex 19: Liam reads 5 chapters of a book that has 8 chapters. What fraction of the book does Liam read?

of the book

Ex 20: Vanessa paints 5 squares on a window that has 6 equal squares. What fraction of the window did she paint?

of the window

Ex 21: Sophia cuts her loaf of bread into 8 equal slices. She uses 2 slices to make sandwiches. What fraction of the bread did Sophia use to make the sandwiches?

of the bread

A.5 FINDING NUMERATORS AND DENOMINATORS

Ex 22: State the numerator of the fraction $\frac{3}{5} =$

Ex 23: State the denominator of the fraction $\frac{4}{9} =$

Ex 24: State the denominator of the fraction $\frac{5}{6} =$

Ex 25: State the numerator of the fraction $\frac{0}{3} =$



A.6 WRITING FRACTIONS FROM WORDS

Ex 26: Write as fraction:

one over four = $\frac{\square}{\square}$

Ex 27: Write as fraction:

three over five = $\frac{\square}{\square}$

Ex 28: Write as fraction:

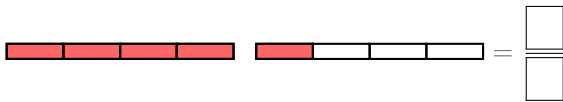
three quarters = $\frac{\square}{\square}$

Ex 29: Write as fraction:

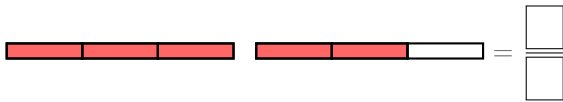
six over hundred = $\frac{\square}{\square}$

A.7 FINDING FRACTIONS GREATER THAN 1 IN DIAGRAMS

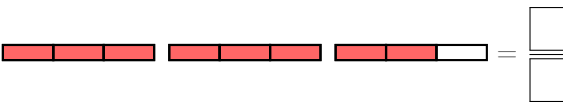
Ex 30: A bar represents 1. Find the fraction that represents the shaded part:



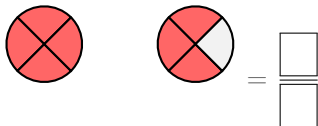
Ex 31: A bar represents 1. Find the fraction that represents the shaded part:



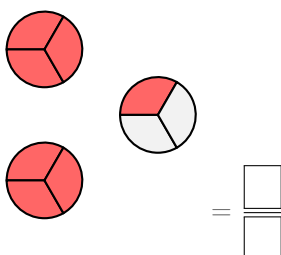
Ex 32: A bar represents 1. Find the fraction that represents the shaded part:



Ex 33: A circle represents 1. Find the fraction that represents the shaded part:



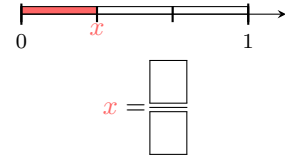
Ex 34: A circle represents 1. Find the fraction that represents the shaded part:



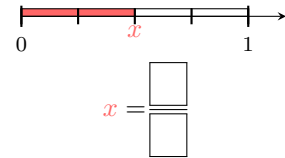
B ON THE NUMBER LINE

B.1 FINDING FRACTIONS WITH BAR FRACTION MODEL

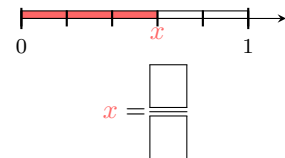
Ex 35: Find the value of x



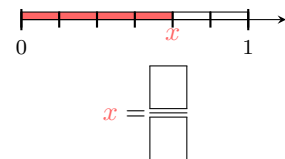
Ex 36: Find the value of x



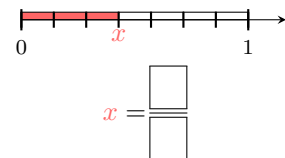
Ex 37: Find the value of x



Ex 38: Find the value of x

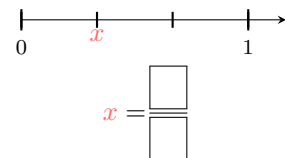


Ex 39: Find the value of x

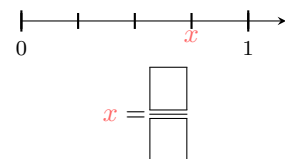


B.2 FINDING FRACTIONS

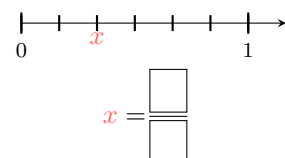
Ex 40: Find the value of x



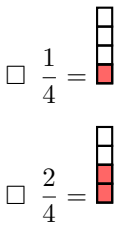
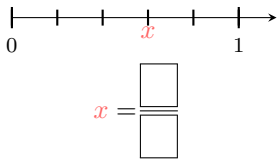
Ex 41: Find the value of x



Ex 42: Find the value of x

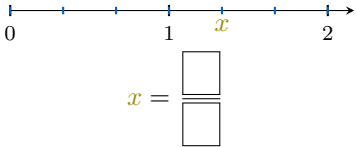


Ex 43: Find the value of x

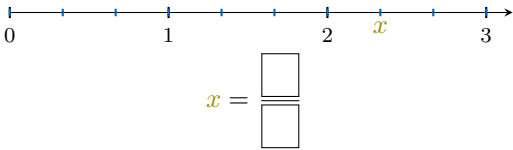


B.3 FINDING FRACTIONS GREATER THAN 1

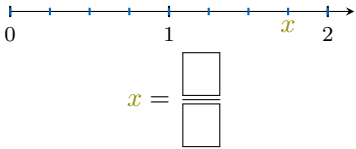
Ex 44: Find the value of x



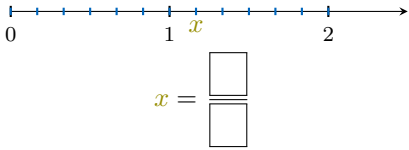
Ex 45: Find the value of x



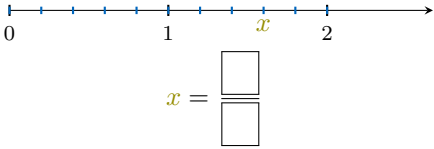
Ex 46: Find the value of x



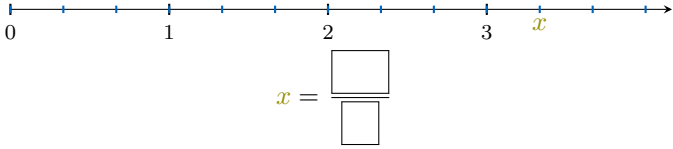
Ex 47: Find the value of x



Ex 48: Find the value of x

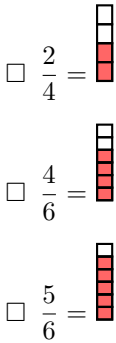


Ex 49: Find the value of x



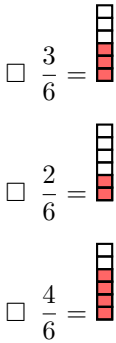
MCQ 51: Find the equal fraction of $\frac{2}{3} =$

Choose the correct answer:



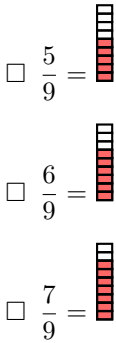
MCQ 52: Find the equal fraction of $\frac{1}{2} =$

Choose the correct answer:



MCQ 53: Find the equal fraction of $\frac{2}{3} =$

Choose the correct answer:

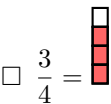


C EQUIVALENT FRACTIONS

C.1 IDENTIFYING EQUIVALENT FRACTIONS

MCQ 50: Find the equal fraction of $\frac{1}{2} =$

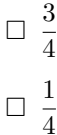
Choose the correct answer:



C.2 IDENTIFYING EQUIVALENT FRACTIONS

MCQ 54: Find the equal fraction of $\frac{1}{2}$

Choose the correct answer:



☐ $\frac{2}{4}$

MCQ 55: Find the equal fraction of $\frac{2}{3}$
Choose the correct answer:

☐ $\frac{2}{4}$

☐ $\frac{4}{6}$

☐ $\frac{5}{6}$

MCQ 56: Find the equal fraction of $\frac{1}{2}$
Choose the correct answer:

☐ $\frac{3}{6}$

☐ $\frac{2}{6}$

☐ $\frac{4}{6}$

MCQ 57: Find the equal fraction of $\frac{2}{3}$
Choose the correct answer:

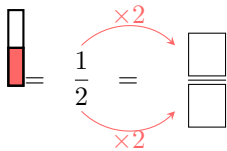
☐ $\frac{5}{9}$

☐ $\frac{6}{9}$

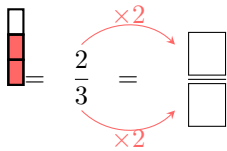
☐ $\frac{7}{9}$

C.3 WRITING EQUIVALENT FRACTIONS

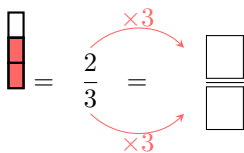
Ex 58:



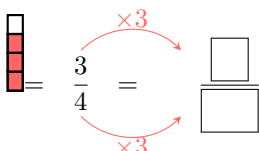
Ex 59:



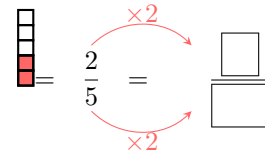
Ex 60:



Ex 61:



Ex 62:



C.4 FINDING THE MISSING NUMERATOR

Ex 63:

$\frac{1}{2} = \frac{\square}{4}$

Ex 64:

$\frac{2}{3} = \frac{\square}{9}$

Ex 65:

$\frac{3}{2} = \frac{\square}{8}$

Ex 66:

$\frac{5}{4} = \frac{\square}{12}$

C.5 FINDING THE MISSING DENOMINATOR

Ex 67:

$\frac{1}{2} = \frac{2}{\square}$

Ex 68:

$\frac{2}{3} = \frac{4}{\square}$

Ex 69:

$\frac{1}{2} = \frac{3}{\square}$


Ex 70:

$\frac{2}{5} = \frac{6}{\square}$

D ADDITION AND SUBTRACTION


D.1 ADDING FRACTIONS WITH COMMON DENOMINATORS

Ex 71:




$$\frac{1}{4} + \frac{2}{4} = \frac{\boxed{}}{\boxed{}}$$

Ex 72:




$$\frac{3}{5} + \frac{1}{5} = \frac{\boxed{}}{\boxed{}}$$

Ex 73:




$$\frac{2}{6} + \frac{3}{6} = \frac{\boxed{}}{\boxed{}}$$

Ex 74:



$$\frac{2}{3} + \frac{2}{3} = \frac{\boxed{}}{\boxed{}}$$

Ex 75:



$$\frac{4}{5} + \frac{2}{5} = \frac{\boxed{}}{\boxed{}}$$

D.2 ADDING FRACTIONS WITH COMMON DENOMINATORS

Ex 76:

$$\frac{1}{4} + \frac{2}{4} = \frac{\boxed{}}{\boxed{}}$$

Ex 77:

$$\frac{3}{5} + \frac{1}{5} = \frac{\boxed{}}{\boxed{}}$$

Ex 78:

Ex 79:

$$\frac{2}{6} + \frac{3}{6} = \frac{\boxed{}}{\boxed{}}$$


Ex 80:

$$\frac{2}{3} + \frac{2}{3} = \frac{\boxed{}}{\boxed{}}$$

$$\frac{4}{5} + \frac{2}{5} = \frac{\boxed{}}{\boxed{}}$$


D.3 SUBTRACTING FRACTIONS WITH COMMON DENOMINATORS

Ex 81:




$$\frac{3}{4} - \frac{2}{4} = \frac{\boxed{}}{\boxed{}}$$

Ex 82:




$$\frac{4}{5} - \frac{3}{5} = \frac{\boxed{}}{\boxed{}}$$

Ex 83:




$$\frac{3}{4} - \frac{1}{4} = \frac{\boxed{}}{\boxed{}}$$

Ex 84:



$$\frac{4}{3} - \frac{2}{3} = \frac{\boxed{}}{\boxed{}}$$

Ex 85:



$$\frac{7}{6} - \frac{2}{6} = \frac{\boxed{}}{\boxed{}}$$

D.4 SUBTRACTING FRACTIONS WITH COMMON DENOMINATORS

Ex 86:

$$\frac{3}{4} - \frac{2}{4} = \frac{\boxed{}}{\boxed{}}$$

Ex 87:

$$\frac{4}{5} - \frac{3}{5} = \frac{\boxed{}}{\boxed{}}$$

Ex 88:

$$\frac{3}{4} - \frac{1}{4} = \frac{\boxed{}}{\boxed{}}$$

Ex 89:

$$\frac{4}{3} - \frac{2}{3} = \frac{\boxed{}}{\boxed{}}$$

Ex 90:

$$\frac{7}{6} - \frac{2}{6} = \frac{\boxed{}}{\boxed{}}$$