RADIANT HEIGHTS ACADEMY

From Radiant Minds to Great Heights

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Student Name: _____

MATHEMATICS BOOKLET

Level 5-6 Term 2 Week 3

THIS WEEK'S FOCUS

- ✔ Adding and Subtracting Fractions
- ✔ Improper to Mixed & Vice Versa
- ✔ Word Based Problems

FRACTIONS

TYPES OF FRACTIONS & CONVERSIONS

TYPES OF FRACTIONS

PROPER FRACTION

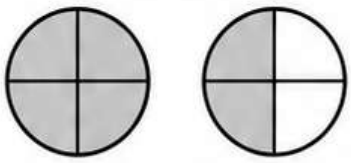
The numerator is smaller than the denominator.
The value is less than 1.

$\frac{3}{5}$

IMPROPER FRACTION

The numerator is greater than or equal to the denominator.
The value is 1 or more.

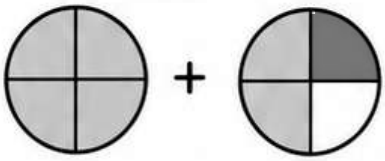
$\frac{7}{4}$



MIXED NUMBER

A whole number and a proper fraction together.

$1\frac{3}{4}$



MIXED NUMBER → IMPROPER FRACTION

Turn a mixed number into an improper fraction.

STEPS

1. Multiply the whole number by the denominator.
2. Add the numerator.
3. Keep the same denominator.

EXAMPLE

$$2\frac{3}{5} = \frac{(2 \times 5) + 3}{5} = \frac{13}{5}$$

- ② $2 \times 5 = 10$
- ② $10 + 3 = 13$
- ③ Keep the denominator the same.

$$2\frac{3}{5} = \frac{13}{5}$$

IMPROPER FRACTION → MIXED NUMBER

Turn an improper fraction into a mixed number.

STEPS

1. Ask: How many times does the denominator fit into the numerator?
2. Find the closest number without going over.
3. That number is your whole number.
4. Find the remainder (what is left over).
5. The remainder becomes your new numerator.
6. Keep the same denominator.

EXAMPLE

$\frac{13}{5}$

$$5\overline{)\,13}\quad 2,\ -10,\ 3$$

1. How many times does 5 fit into 13?
2. It fits 2 times ($2 \times 5 = 10$)
3. Whole number = 2
4. Remainder = 3
5. New numerator = 3
6. Denominator stays 5

$2\frac{3}{5}$

$$\frac{13}{5} = 2\frac{3}{5}$$

QUICK TIPS

- ★ If the numerator is smaller than the denominator → Proper Fraction
- ★ If the numerator is greater than or equal to the denominator → Improper Fraction
- ★ If it has a whole number and a fraction → Mixed Number

ADDING & SUBTRACTING FRACTIONS

☆ Notes, Methods & Examples ☆

ADDING FRACTIONS

1 ADDING FRACTIONS (Same Denominator)

STEPS

1. Make sure the denominators are the same.
2. Add the numerators.
3. Keep the denominator.

EXAMPLE

$$\frac{2}{5} + \frac{1}{5} = \boxed{\frac{2+1}{5}} = \frac{3}{5}$$

2 ADDING FRACTIONS (Different Denominators – Find Common Denominator)

STEPS

1. Find a common denominator.
2. Rewrite the fractions with equivalent fractions.
3. Add the numerators.
4. Keep the common denominator.

EXAMPLE

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

$$\frac{3}{6} + \frac{2}{6} = \frac{3+2}{6} = \frac{5}{6}$$

Common denominator of 2 and 3 is 6

$\frac{1}{2} = \frac{3}{6}$ $\frac{1}{3} = \frac{2}{6}$

3 ADDING MIXED NUMBERS

STEPS

1. Add the whole numbers.
2. Add the fractions (use either of the methods above).
3. Combine the answers. If the fraction is improper, convert it to a mixed number.

EXAMPLE

$$1\frac{1}{2} + 2\frac{1}{3}$$

Add whole numbers: $1 + 2 = 3$

Add fractions: $\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$

Combine: $3 + \frac{5}{6} = 3\frac{5}{6}$

SUBTRACTING FRACTIONS

1 SUBTRACTING FRACTIONS (Same Denominator)

STEPS

1. Make sure the denominators are the same.
2. Subtract the numerators.
3. Keep the denominator.

EXAMPLE

$$\frac{5}{7} - \frac{2}{7} = \frac{5-2}{7} = \frac{3}{7}$$

2 SUBTRACTING FRACTIONS (Different Denominators – Two Methods)

METHOD A
Use Common Denominator

1. Find a common denominator.
2. Rewrite the fractions with equivalent fractions.
3. Subtract the numerators.
4. Keep the common denominator.

EXAMPLE

$$\frac{3}{4} - \frac{1}{6} =$$

$$\frac{9}{12} - \frac{2}{12} = \frac{9-2}{12} = \frac{7}{12}$$

Common denominator of 4 and 6 is 12

METHOD B
Convert to Improper Fractions

1. Convert both mixed numbers (to improper fractions).
2. Find a common denominator.
3. Subtract the numerators.
4. Keep the denominator.
5. Convert back to a mixed number (if needed).

EXAMPLE

$$2\frac{1}{2} - 1\frac{1}{4} \rightarrow \frac{5}{2} - \frac{5}{4}$$

$$\frac{10}{4} - \frac{5}{4} = \frac{5}{4} = 1\frac{1}{4}$$

QUICK TIPS

- ★ Always make sure the denominators are the same before you add or subtract.
- ★ Simplify your answer to its simplest form.
- ★ For mixed numbers: add or subtract the whole numbers and fractions separately (when adding).
- ★ Choose the method that is easiest for you!

MULTIPLYING & DIVIDING FRACTIONS

MULTIPLYING FRACTIONS

METHOD 1: STRAIGHT MULTIPLY

Steps:

1. Multiply the numerators.
2. Multiply the denominators.
3. Simplify your answer.

EXAMPLE:

$$\frac{2}{3} \times \frac{4}{5}$$

$$= \frac{2 \times 4}{3 \times 5}$$

$$= \frac{8}{15}$$

Already in simplest form!

METHOD 2: CROSS SIMPLIFICATION (SMARTER WAY)

Steps:

1. Look diagonally for common factors (numerator ↔ denominator).
2. Divide BEFORE multiplying.
3. Then multiply across.

EXAMPLE:

$$\frac{2}{3} \times \frac{6}{5}$$

$6 \div 3 = 2$
$3 \div 3 = 1$

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

$$= \frac{2 \times 2}{1 \times 5} = \frac{4}{5}$$

TIP:
Cross simplify only diagonally (numerator with denominator).
Do NOT simplify across the top or bottom.

DIVIDING FRACTIONS

RULE: KEEP, FLIP, MULTIPLY

Steps:

1. Keep the first fraction.
2. Flip the second fraction (reciprocal).
3. Multiply.
4. Simplify your answer.

EXAMPLE 1: STANDARD METHOD

$$\frac{2}{3} \div \frac{4}{5} \rightarrow \text{Flip second} \rightarrow \frac{2}{3} \times \frac{5}{4}$$

$$= \frac{2 \times 5}{3 \times 4} = \frac{10}{12} = \frac{5}{6}$$

Simplify divide by 2

EXAMPLE 2: WITH CROSS SIMPLIFICATION

$$\frac{2}{3} \div \frac{4}{5} \rightarrow \text{Flip second} \rightarrow \frac{2}{3} \times \frac{5}{4}$$

$2 \div 2 = 1$
$4 \div 2 = 2$

$$\frac{1 \times 5}{3 \times 2} = \frac{5}{6}$$

SIMPLIFYING FRACTIONS

What does "simplify" mean?
Writing a fraction in its smallest form.

Using **HCF** (Highest Common Factor)

EXAMPLE:

$\frac{12}{18}$ HCF of 12 and 18 = 6

$$= \frac{12 \div 6}{18 \div 6} = \frac{2}{3}$$

Student-Friendly Strategy

- If both numbers are even → divide by 2.
- Keep going until numbers are smaller.
- Then check for bigger factors.

EXAMPLE:

$$\frac{8}{12} \div \frac{8 \div 2}{12 \div 2} = \frac{4}{6} = \frac{4 \div 2}{6 \div 2} = \frac{2}{3}$$

(÷2) (÷2 again)

HCF & LCM

HCF
(HIGHEST COMMON FACTOR)

☆ The biggest number that divides both numbers exactly.
Used for simplifying fractions.

EXAMPLE:

Find the HCF of 12 and 18.

Factors of 12: 1, 2, 3, 4, (6), 12

Factors of 18: 1, 2, 3, (6), 9, 18

Common factors: 1, 2, 3, 6

HCF = 6

LCM
(LOWEST COMMON MULTIPLE)

☆ The smallest number that both numbers can go into.
Used for adding and subtracting fractions.

EXAMPLE:

Find the LCM of 3 and 4.

Multiples of 3: 3, 6, 9, (12), 15, ...

Multiples of 4: 4, 8, (12), 16, 20, ...

LCM = 12

KEY REMINDERS

- ★ Multiply → Top × Top, Bottom × Bottom.
- ★ Divide → Keep, Flip, Multiply.
- ★ Cross simplify only diagonally.
- ★ Always simplify your answer.
- ★ Simplify early if possible to make numbers smaller!

Adding & Subtracting Fractions

Name:

Solve each problem.

1) $\frac{1}{2} + \frac{4}{5} =$

2) $\frac{23}{6} + 3\frac{3}{10} =$

3) $\frac{20}{8} - \frac{12}{10} =$

4) $1\frac{7}{10} + \frac{7}{4} =$

5) $1\frac{1}{4} - \frac{12}{10} =$

6) $\frac{8}{5} + \frac{19}{12} =$

7) $1\frac{3}{8} - 1\frac{1}{10} =$

8) $\frac{8}{5} + \frac{11}{6} =$

9) $\frac{1}{6} + \frac{1}{2} =$

10) $3\frac{1}{2} + \frac{13}{5} =$

11) $\frac{11}{4} + 2\frac{9}{10} =$

12) $2\frac{1}{10} + 1\frac{4}{8} =$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Adding & Subtracting Fractions

Name:

Solve each problem.

1) $2\frac{4}{6} + 2\frac{4}{5} =$

2) $\frac{9}{4} + 1\frac{9}{12} =$

3) $\frac{3}{5} - \frac{3}{6} =$

4) $2\frac{4}{12} + 1\frac{3}{4} =$

5) $\frac{4}{5} - \frac{4}{10} =$

6) $2\frac{2}{5} + 2\frac{2}{3} =$

7) $\frac{5}{2} - \frac{9}{8} =$

8) $\frac{7}{2} + 1\frac{4}{6} =$

9) $\frac{22}{6} - \frac{27}{12} =$

10) $2\frac{4}{12} + \frac{19}{8} =$

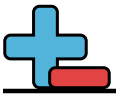
11) $1\frac{4}{6} + \frac{7}{4} =$

12) $\frac{2}{12} + \frac{1}{5} =$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								



Adding & Subtracting Fractions

Name:

Solve each problem.

1) $2\frac{5}{6} - 2\frac{1}{5} =$

2) $3\frac{5}{8} + \frac{7}{3} =$

3) $\frac{1}{10} + \frac{1}{2} =$

4) $\frac{4}{6} + \frac{9}{12} =$

5) $2\frac{1}{3} - 1\frac{2}{10} =$

6) $\frac{7}{2} + 1\frac{1}{8} =$

7) $\frac{15}{4} - \frac{3}{2} =$

8) $\frac{8}{12} + \frac{3}{4} =$

9) $\frac{26}{12} - \frac{7}{6} =$

10) $\frac{7}{6} + 1\frac{2}{8} =$

11) $1\frac{2}{4} - \frac{9}{6} =$

12) $\frac{4}{3} + 1\frac{7}{10} =$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Adding & Subtracting Fractions

Name:

Solve each problem.

1) $\frac{11}{6} - \frac{12}{10} =$

2) $2\frac{8}{10} + 2\frac{3}{5} =$

3) $1\frac{2}{5} + \frac{5}{3} =$

4) $\frac{8}{5} + 1\frac{3}{12} =$

5) $\frac{5}{2} - 2\frac{4}{8} =$

6) $1\frac{4}{5} + 1\frac{2}{4} =$

7) $\frac{5}{2} - \frac{18}{12} =$

8) $\frac{31}{12} + 2\frac{1}{4} =$

9) $\frac{1}{2} + \frac{3}{4} =$

10) $1\frac{3}{8} + \frac{4}{3} =$

11) $1\frac{1}{8} - \frac{11}{10} =$

12) $2\frac{1}{3} + 2\frac{2}{4} =$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Adding & Subtracting Fractions

Name:

Solve each problem.

1) $\frac{20}{6} - \frac{7}{3} =$

2) $\frac{30}{8} + \frac{17}{12} =$

3) $\frac{5}{6} - \frac{2}{5} =$

4) $3\frac{1}{3} + \frac{15}{8} =$

5) $1\frac{4}{6} - 1\frac{7}{12} =$

6) $1\frac{5}{8} + 1\frac{3}{5} =$

7) $3\frac{9}{12} - \frac{5}{2} =$

8) $\frac{18}{8} + 2\frac{7}{12} =$

9) $\frac{44}{12} - 1\frac{1}{5} =$

10) $\frac{31}{10} + 1\frac{2}{6} =$

11) $\frac{11}{5} + \frac{11}{4} =$

12) $\frac{2}{10} + \frac{5}{8} =$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Adding & Subtracting Fractions

Name:

Solve each problem.

1) Adam jogged $8\ ^{1}/_{2}$ kilometers on Monday and $7\ ^{1}/_{2}$ kilometers on Tuesday. What is the difference between these two distances?

2) On Monday George spent $10\ ^{2}/_{3}$ hours studying. On Tuesday he spent another $4\ ^{1}/_{3}$ hours studying. What is the combined time he spent studying?

3) A coach filled up a cooler with water until it weighed $14\ ^{1}/_{3}$ pounds. After the game the cooler weighed $11\ ^{1}/_{3}$ pounds. How many pounds lighter was the cooler after the game?

4) Carol's class recycled $5\ ^{2}/_{4}$ boxes of paper in a month. If they recycled another $8\ ^{1}/_{4}$ boxes the next month was is the total amount they recycled?

5) A king size chocolate bar was $11\ ^{7}/_{9}$ inches long. The regular size bar was $8\ ^{8}/_{9}$ inches long. What is the difference in length between the two bars?

6) A small box of nails was $10\ ^{1}/_{2}$ inches tall. If the large box of nails was $6\ ^{1}/_{2}$ inches taller, how tall is the large box of nails?

7) Lana had planned to walk $5\ ^{1}/_{2}$ miles on Wednesday. If she walked $3\ ^{1}/_{2}$ miles in the morning, how far would she need to walk in the afternoon?

8) Mike bought a box of fruit that weighed $2\ ^{3}/_{5}$ kilograms. If he bought a second box that weighed $9\ ^{3}/_{5}$ kilograms, what is the combined weight of both boxes?

9) While exercising Victor travelled $16\ ^{1}/_{2}$ kilometers. If he walked $10\ ^{1}/_{2}$ kilometers and jogged the rest, how many kilometers did he jog?

10) Gwen bought a bamboo plant that was $3\ ^{1}/_{8}$ feet high. After a month it had grown another $4\ ^{5}/_{8}$ feet. What was the total height of the plant after a month?

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0

Solve each problem.

1) During a blizzard it snowed $12\ ^{2}/_{4}$ inches. After a week the sun had melted $8\ ^{2}/_{4}$ inches of snow. How many inches of snow is left?

2) For Halloween, Carol received $3\ ^{2}/_{4}$ pounds of candy in the first hour and another $5\ ^{1}/_{4}$ pounds the second hour. How much candy did she get total?

3) A king size chocolate bar was $9\ ^{1}/_{4}$ inches long. The regular size bar was $7\ ^{1}/_{4}$ inches long. What is the difference in length between the two bars?

4) Will drew a line that was $9\ ^{6}/_{8}$ inches long. If he drew a second line that was $4\ ^{1}/_{8}$ inches longer, what is the length of the second line?

5) While exercising Kaleb travelled $3\ ^{5}/_{10}$ kilometers. If he walked $2\ ^{3}/_{10}$ kilometers and jogged the rest, how many kilometers did he jog?

6) At the beach, Victor built a sandcastle that was $4\ ^{3}/_{6}$ feet high. If he added a flag that was $3\ ^{5}/_{6}$ feet high, what is the total height of his creation?

7) A large box of nails weighed $10\ ^{3}/_{8}$ ounces. A small box of nails weighed $8\ ^{2}/_{8}$ ounces. What is the difference in weight between the two boxes?

8) While exercising Billy jogged $2\ ^{2}/_{4}$ kilometers and walked $10\ ^{3}/_{4}$ kilometers. What is the total distance he traveled?

9) John bought a box of fruit that weighed $9\ ^{6}/_{8}$ kilograms. If he gave away $2\ ^{4}/_{8}$ kilograms of fruit to his friends, how many kilograms does he have left?

10) On Monday Rachel spent $5\ ^{2}/_{9}$ hours studying. On Tuesday she spent another $5\ ^{7}/_{9}$ hours studying. What is the combined length of time she spent studying?

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0

Solve each problem.

1) In two months Faye's class recycled $10\ ^{6}/_{8}$ pounds of paper. If they recycled $2\ ^{4}/_{8}$ pounds the first month, how much did they recycle the second month?

2) Olivia walked $2\ ^{6}/_{10}$ miles in the morning and another $5\ ^{2}/_{10}$ miles in the afternoon. What was the total distance she walked?

3) Janet had planned to walk $4\ ^{1}/_{3}$ miles on Wednesday. If she walked $2\ ^{1}/_{3}$ miles in the morning, how far would she need to walk in the afternoon?

4) While exercising Frank jogged $8\ ^{3}/_{10}$ kilometers and walked $10\ ^{4}/_{10}$ kilometers. What is the total distance he traveled?

5) Over the weekend Amy spent $4\ ^{1}/_{3}$ hours total studying. If she spent $2\ ^{2}/_{3}$ hours studying on Saturday, how long did she study on Sunday?

6) Haley's new puppy weighed $5\ ^{5}/_{9}$ pounds. After a month it had gained $8\ ^{4}/_{9}$ pounds. What is the weight of the puppy after a month?

7) Adam drew a line that was $5\ ^{5}/_{7}$ inches long. If he drew a second line that was $4\ ^{2}/_{7}$ inches long, what is the difference between the length of the two lines?

8) Vanessa bought a bamboo plant that was $10\ ^{8}/_{9}$ feet high. After a month it had grown another $5\ ^{6}/_{9}$ feet. What was the total height of the plant after a month?

9) Will bought a box of fruit that weighed $8\ ^{1}/_{3}$ kilograms. If he gave away $6\ ^{2}/_{3}$ kilograms of fruit to his friends, how many kilograms does he have left?

10) In December it snowed $5\ ^{2}/_{3}$ inches. In January it snowed $6\ ^{2}/_{3}$ inches. What is the combined amount of snow for December and January?

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0

Adding & Subtracting Fractions

Name:

Solve each problem.

1) A restaurant had $5\ ^{2}/_{7}$ gallons of soup at the start of the day. By the end of the day they had $3\ ^{6}/_{7}$ gallons left. How many gallons of soup did they use during the day?

2) A small box of nails was $6\ ^{7}/_{10}$ inches tall. If the large box of nails was $6\ ^{8}/_{10}$ inches taller, how tall is the large box of nails?

3) Janet had $7\ ^{1}/_{2}$ cups of flour. If she used $3\ ^{1}/_{2}$ cups baking, how much flour did she have left?

4) A chef bought $2\ ^{5}/_{8}$ pounds of carrots. If he later bought another $10\ ^{1}/_{8}$ pounds of carrots, what is the total weight of carrots he bought?

5) A king size chocolate bar was $9\ ^{6}/_{7}$ inches long. The regular size bar was $3\ ^{1}/_{7}$ inches long. What is the difference in length between the two bars?

6) On Saturday a restaurant used $5\ ^{2}/_{8}$ cans of vegetables. On Sunday they used another $3\ ^{6}/_{8}$ cans. What is the total amount of vegetables they used?

7) Katie had planned to walk $4\ ^{2}/_{5}$ miles on Wednesday. If she walked $3\ ^{3}/_{5}$ miles in the morning, how far would she need to walk in the afternoon?

8) Maria's class recycled $6\ ^{4}/_{7}$ boxes of paper in a month. If they recycled another $10\ ^{1}/_{7}$ boxes the next month was is the total amount they recycled?

9) Ned drew a line that was $4\ ^{6}/_{7}$ inches long. If he drew a second line that was $2\ ^{1}/_{7}$ inches long, what is the difference between the length of the two lines?

10) On Monday Luke spent $5\ ^{8}/_{10}$ hours studying. On Tuesday he spent another $4\ ^{5}/_{10}$ hours studying. What is the combined time he spent studying?

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0

Solve each problem.

1) Amy bought a bamboo plant that was $9\ ^{3}/_{6}$ feet high. When she got it home she cut $7\ ^{5}/_{6}$ feet off of it. How tall was the plant after she cut it down?

2) A small box of nails was $6\ ^{9}/_{10}$ inches tall. If the large box of nails was $4\ ^{7}/_{10}$ inches taller, how tall is the large box of nails?

3) For Halloween, Nancy received $8\ ^{1}/_{4}$ pounds of candy. After a week her family had eaten $5\ ^{1}/_{4}$ pounds. How many pounds of candy does she have left?

4) On Monday Paul spent $2\ ^{1}/_{5}$ hours studying. On Tuesday he spent another $6\ ^{3}/_{5}$ hours studying. What is the combined time he spent studying?

5) A coach filled up a cooler with water until it weighed $7\ ^{2}/_{4}$ pounds. After the game the cooler weighed $4\ ^{1}/_{4}$ pounds. How many pounds lighter was the cooler after the game?

6) Janet bought a bamboo plant that was $2\ ^{4}/_{5}$ feet high. After a month it had grown another $3\ ^{2}/_{5}$ feet. What was the total height of the plant after a month?

7) Maria had $8\ ^{1}/_{4}$ cups of flour. If she used $3\ ^{3}/_{4}$ cups baking, how much flour did she have left?

8) At the beach, Jerry built a sandcastle that was $4\ ^{6}/_{9}$ feet high. If he added a flag that was $4\ ^{6}/_{9}$ feet high, what is the total height of his creation?

9) John spent $10\ ^{5}/_{8}$ hours working on his reading and math homework. If he spent $2\ ^{1}/_{8}$ hours on his reading homework, how much time did he spend on his math homework?

10) On Monday Carol spent $3\ ^{3}/_{4}$ hours studying. On Tuesday she spent another $5\ ^{2}/_{4}$ hours studying. What is the combined length of time she spent studying?

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0

Mixed Number Fraction to Improper Fraction

Name:

Convert the mixed number fraction to improper fraction.

$3\ \frac{2}{5}$

First multiply the denominator by the whole number.

$5 \times 3 = 15$

$3\ \frac{17}{5}$

Next add your answer from step 1 to your numerator.

$\frac{17}{5}$

Finally drop the whole number. Now you have your improper fraction.

Ex) $8\frac{1}{3} = \frac{25}{3}$

1) $2\frac{4}{10} =$

2) $6\frac{4}{9} =$

3) $10\frac{1}{2} =$

4) $9\frac{5}{8} =$

5) $2\frac{4}{8} =$

6) $9\frac{4}{6} =$

7) $3\frac{4}{6} =$

8) $1\frac{1}{2} =$

9) $6\frac{6}{8} =$

10) $4\frac{1}{3} =$

11) $10\frac{4}{7} =$

12) $3\frac{2}{4} =$

13) $3\frac{7}{8} =$

14) $7\frac{3}{4} =$

15) $10\frac{2}{9} =$

16) $2\frac{4}{6} =$

17) $3\frac{6}{9} =$

Answers

Ex. $\frac{25}{3}$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Mixed Number Fraction to Improper Fraction

Name:

Convert the mixed number fraction to improper fraction.

$3\ \frac{2}{5}$

First multiply the denominator by the whole number.

$5 \times 3 = 15$

$3\ \frac{17}{5}$

Next add your answer from step 1 to your numerator.

$\frac{17}{5}$

Finally drop the whole number. Now you have your improper fraction.

Ex) $7\frac{9}{10} = \frac{79}{10}$

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

2) $9\frac{3}{8} =$

3) $7\frac{3}{8} =$

4) $6\frac{1}{4} =$

5) $9\frac{3}{6} =$

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

7) $8\frac{1}{6} =$

8) $2\frac{3}{10} =$

9) $1\frac{3}{5} =$

10) $1\frac{1}{4} =$

11) $1\frac{1}{5} =$

12) $6\frac{4}{9} =$

13) $7\frac{2}{4} =$

14) $2\frac{1}{6} =$

15) $3\frac{1}{4} =$

16) $1\frac{1}{2} =$

17) $3\frac{2}{3} =$

Answers

Ex. $\frac{79}{10}$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Improper Fraction to Mixed Number Fraction

Name:

Convert the improper fraction to a mixed number fraction.

$\frac{17}{5}$
First divide the numerator by the denominator.
17 ÷ 5 = 3 r2

$3\ \frac{2}{5}$
The 3 is your whole number. While the remainder become the numerator.

$3\ \frac{2}{5}$
Your denominator stays the same. And now you have your mixed number.

Ex) $\frac{48}{5} = 9\frac{3}{5}$

1) $\frac{16}{5} =$

2) $\frac{48}{9} =$

3) $\frac{49}{5} =$

4) $\frac{19}{7} =$

5) $\frac{32}{3} =$

6) $\frac{38}{9} =$

7) $\frac{74}{7} =$

8) $\frac{58}{9} =$

9) $\frac{23}{8} =$

10) $\frac{51}{9} =$

11) $\frac{83}{8} =$

12) $\frac{53}{5} =$

13) $\frac{35}{4} =$

14) $\frac{23}{4} =$

15) $\frac{55}{6} =$

16) $\frac{26}{4} =$

17) $\frac{24}{7} =$

Answers

Ex. $9\frac{3}{5}$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Improper Fraction to Mixed Number Fraction

Name:

Convert the improper fraction to a mixed number fraction.

$\frac{17}{5}$
First divide the numerator by the denominator.
17 ÷ 5 = 3 r2

$3\ \frac{2}{5}$
The 3 is your whole number. While the remainder become the numerator.

$3\ \frac{2}{5}$
Your denominator stays the same. And now you have your mixed number.

Ex) $\frac{72}{10} = 7\frac{2}{10}$

1) $\frac{17}{3} =$

2) $\frac{50}{9} =$

3) $\frac{53}{6} =$

4) $\frac{39}{7} =$

5) $\frac{11}{3} =$

6) $\frac{54}{5} =$

7) $\frac{10}{7} =$

8) $\frac{29}{3} =$

9) $\frac{29}{6} =$

10) $\frac{39}{9} =$

11) $\frac{19}{3} =$

12) $\frac{10}{4} =$

13) $\frac{37}{5} =$

14) $\frac{67}{10} =$

15) $\frac{10}{3} =$

16) $\frac{17}{2} =$

17) $\frac{18}{7} =$

Answers

Ex. $7\frac{2}{10}$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Improper Fraction to Mixed Number Fraction

Name:

Convert the improper fraction to a mixed number fraction.

$\frac{17}{5}$	$3\ \frac{2}{5}$	$3\ \frac{2}{5}$
First divide the numerator by the denominator. 17 ÷ 5 = 3 r2	The 3 is your whole number. While the remainder become the numerator.	Your denominator stays the same. And now you have your mixed number.

Ex) $\frac{8}{6} = 1\frac{2}{6}$

1) $\frac{17}{3} =$

2) $\frac{38}{6} =$

3) $\frac{38}{8} =$

4) $\frac{23}{5} =$

5) $\frac{41}{4} =$

6) $\frac{37}{9} =$

7) $\frac{41}{9} =$

8) $\frac{101}{10} =$

9) $\frac{22}{3} =$

10) $\frac{15}{8} =$

11) $\frac{3}{2} =$

12) $\frac{50}{7} =$

13) $\frac{31}{4} =$

14) $\frac{25}{7} =$

15) $\frac{7}{6} =$

16) $\frac{66}{8} =$

17) $\frac{37}{4} =$

Answers

Ex. $1\frac{2}{6}$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0