

# PERFECT

# Maths 3



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## Whole Numbers, Decimals, and Fractions

Add or subtract. Write your answer in simplest form

$$\begin{array}{r} \text{1.} \quad 473052 \\ \quad 946721 \\ \quad 423106 \\ + 157646 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b} \quad 4\frac{1}{2} \\ \quad 1\frac{1}{3} \\ + 5\frac{1}{4} \\ \hline \end{array}$$

$$\begin{array}{r} \text{c} \quad 716.24 \\ - 513.757 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d} \quad \frac{2}{3} \\ \quad \frac{2}{7} \\ + \frac{5}{6} \\ \hline \end{array}$$

$$\begin{array}{r} \text{e} \quad 476392 \\ - 103477 \\ \hline \end{array}$$

$$\begin{array}{r} \text{2.} \quad 710263 \\ - 94317 \\ \hline \end{array}$$

$$\begin{array}{r} 1.072 \\ - 0.76 \\ \hline \end{array}$$

$$\begin{array}{r} 3\frac{3}{4} \\ - 1\frac{1}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 42.761 \\ - 33.014 \\ \hline \end{array}$$

$$\begin{array}{r} 46.102 \\ - 39.4679 \\ \hline \end{array}$$

$$\begin{array}{r} \text{3.} \quad 14.07 \\ \quad 4.267 \\ + 9.105 \\ \hline \end{array}$$

$$\begin{array}{r} 12\frac{1}{3} \\ - 9\frac{7}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 10397 \\ 52797 \\ + 43798 \\ \hline \end{array}$$

$$\begin{array}{r} 3\frac{1}{4} \\ + 7\frac{3}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 4.218 \\ 1.07 \\ + 19.2376 \\ \hline \end{array}$$

Multiply or divide. Write your answer in simplest form

$$\text{4.} \quad \text{a} \quad 4\frac{1}{3} \div \frac{3}{5} =$$

$$\text{b} \quad \frac{3}{7} \times 9\frac{1}{3} \times \frac{4}{5} =$$

$$\text{c} \quad 3\frac{3}{7} \div 1\frac{1}{8} =$$

$$\begin{array}{r} \text{d} \quad 7.016 \\ \times 0.5 \\ \hline \end{array}$$

$$\text{5.} \quad 4.6 \overline{) 35.88}$$

$$\begin{array}{r} 25.063 \\ \times 0.477 \\ \hline \end{array}$$

$$\begin{array}{r} 14376 \\ \times 92 \\ \hline \end{array}$$

$$512 \overline{) 462717}$$

$$\text{6.} \quad \begin{array}{r} 3147 \\ \times 518 \\ \hline \end{array}$$

$$0.58 \overline{) 2.4766}$$

$$\frac{5}{6} \div 2\frac{7}{8} =$$

$$25 \overline{) 47102}$$

# Whole Numbers, Decimals, and Fractions

Solve each problem

7. Yumi has \$ 14.50, Jess has \$ 12.75, Tamara has \$ 16.35, and Alex has \$ 15.55. How much do they have altogether?

They have \_\_\_\_\_ .

8. Isaac had to write a long paper. He wrote  $3\frac{1}{4}$  pages Monday,  $2\frac{1}{3}$  pages Tuesday, and  $\frac{4}{5}$  page on Wednesday. How many pages did he write?

Isaac wrote \_\_\_\_\_ Pages.

9. Keisha also had to write a paper. She decided to write exactly  $2\frac{1}{4}$  pages each day. How many pages did she write after 5 days?

Keisha wrote \_\_\_\_\_ pages.

10. The Johnsons had \$72,498,33 in a savings account. They spent \$64,934,50 on a down payment for a home. How much was left in their savings ?

The Johnsons had \_\_\_\_\_ left in their savings .

11. Jake makes \$1 16.25 each week, before taxes, at the bookstore. How much money will he make in a year if he works the same number of hours each week?

Jake will make \_\_\_\_\_ .

12. Jake works 15 hours per week. If he makes \$1 16.25 each week, how much does he make per hour?

Jake makes \_\_\_\_\_ per hour.

13. Students collected 6,549 cans in a food drive .They want to give an equal number of cans to 11 homeless shelters. How many cans will each shelter receive? How many will be left over?

Each shelter will receive \_\_\_\_\_ cans. There will be \_\_\_\_\_ left over.

7.

8.

9.

10.

11.

12.

13.

# Addition

Add ones. Add tens.

$$\begin{array}{r} \phantom{3}04\overset{2}{7}\overset{1}{9}7 \\ \text{Addends } \phantom{3}127564 \longrightarrow \\ +493086 \\ \hline \phantom{3}47 \end{array}$$

Add hundreds.

$$\begin{array}{r} \phantom{3}04\overset{1}{2}\overset{1}{9}7 \\ \phantom{3}127564 \longrightarrow \\ +493086 \\ \hline \phantom{3}447 \end{array}$$

Continue adding from right to left.

$$\begin{array}{r} \phantom{3}04\overset{1}{2}\overset{1}{9}7 \\ \phantom{3}127564 \\ +493086 \\ \hline \phantom{3}925447 \longleftarrow \text{Sum} \end{array}$$

Add.

- |    | a  | b  | c  | d  | e  |
|----|--|--|--|--|--|
| 1. | $\begin{array}{r} 27 \\ +19 \\ \hline \end{array}$                         | $\begin{array}{r} 430 \\ +109 \\ \hline \end{array}$                             | $\begin{array}{r} 6037 \\ +7262 \\ \hline \end{array}$                                 | $\begin{array}{r} 10263 \\ +47918 \\ \hline \end{array}$                                     | $\begin{array}{r} 406334 \\ +921180 \\ \hline \end{array}$   |
| 2. | $\begin{array}{r} 62 \\ 13 \\ +75 \\ \hline \end{array}$                   | $\begin{array}{r} 434 \\ 106 \\ +757 \\ \hline \end{array}$                      | $\begin{array}{r} 1463 \\ 1802 \\ +4769 \\ \hline \end{array}$                         | $\begin{array}{r} 40729 \\ 49333 \\ +21201 \\ \hline \end{array}$                            | $\begin{array}{r} 540624 \\ 915002 \\ +479293 \\ \hline \end{array}$                               |
| 3. | $\begin{array}{r} 47 \\ 69 \\ 67 \\ +19 \\ \hline \end{array}$             | $\begin{array}{r} 129 \\ 306 \\ 472 \\ +545 \\ \hline \end{array}$               | $\begin{array}{r} 3904 \\ 1676 \\ 2490 \\ +4601 \\ \hline \end{array}$                 | $\begin{array}{r} 27503 \\ 42656 \\ 10276 \\ +47901 \\ \hline \end{array}$                   | $\begin{array}{r} 247093 \\ 403430 \\ 192371 \\ +690467 \\ \hline \end{array}$                     |
| 4. | $\begin{array}{r} 17 \\ 43 \\ 15 \\ 28 \\ +33 \\ \hline \end{array}$       | $\begin{array}{r} 462 \\ 103 \\ 906 \\ 575 \\ +123 \\ \hline \end{array}$        | $\begin{array}{r} 5062 \\ 1504 \\ 3344 \\ 6293 \\ +7240 \\ \hline \end{array}$         | $\begin{array}{r} 92118 \\ 14174 \\ 11201 \\ 24267 \\ +37642 \\ \hline \end{array}$          | $\begin{array}{r} 476052 \\ 915450 \\ 321737 \\ 423705 \\ +640818 \\ \hline \end{array}$           |
| 5. | $\begin{array}{r} 26 \\ 43 \\ 10 \\ 29 \\ 72 \\ +15 \\ \hline \end{array}$ | $\begin{array}{r} 137 \\ 406 \\ 271 \\ 424 \\ 929 \\ +533 \\ \hline \end{array}$ | $\begin{array}{r} 4263 \\ 9015 \\ 6260 \\ 4176 \\ 1472 \\ +3550 \\ \hline \end{array}$ | $\begin{array}{r} 42973 \\ 17090 \\ 28473 \\ 91555 \\ 32174 \\ +84727 \\ \hline \end{array}$ | $\begin{array}{r} 192763 \\ 427074 \\ 371508 \\ 572916 \\ 319470 \\ +540976 \\ \hline \end{array}$ |

## Subtraction

To subtract, start with ones.  
Rename 1 ten as 10 ones.

Continue subtracting from right to left.  
Rename as necessary.

$$\begin{array}{r} \text{Minuend} \longrightarrow 407\overset{8}{\cancel{0}}\overset{11}{\cancel{2}}\overset{13}{\cancel{3}} \\ \text{Subtrahend} \longrightarrow -146797 \\ \hline 6 \end{array}$$

$$\begin{array}{r} \overset{3}{4}\overset{10}{\cancel{0}}\overset{8}{\cancel{7}}\overset{11}{\cancel{2}}\overset{13}{\cancel{3}} \\ -146797 \\ \hline 261126 \end{array} \longleftarrow \text{difference}$$

Subtract

- |    | a   | b   | c   | d   | e   |
|----|---|---|---|---|---|
| 1. | $\begin{array}{r} 42 \\ - 39 \\ \hline \end{array}$ | $\begin{array}{r} 617 \\ - 79 \\ \hline \end{array}$  | $\begin{array}{r} 4762 \\ - 2379 \\ \hline \end{array}$ | $\begin{array}{r} 24971 \\ - 10792 \\ \hline \end{array}$ | $\begin{array}{r} 426707 \\ - 92109 \\ \hline \end{array}$  |
| 2. | $\begin{array}{r} 76 \\ - 9 \\ \hline \end{array}$  | $\begin{array}{r} 462 \\ - 107 \\ \hline \end{array}$ | $\begin{array}{r} 5455 \\ - 4909 \\ \hline \end{array}$ | $\begin{array}{r} 82793 \\ - 4074 \\ \hline \end{array}$  | $\begin{array}{r} 847910 \\ - 703247 \\ \hline \end{array}$ |
| 3. | $\begin{array}{r} 87 \\ - 49 \\ \hline \end{array}$ | $\begin{array}{r} 921 \\ - 88 \\ \hline \end{array}$  | $\begin{array}{r} 3712 \\ - 909 \\ \hline \end{array}$  | $\begin{array}{r} 61735 \\ - 54269 \\ \hline \end{array}$ | $\begin{array}{r} 543072 \\ - 81794 \\ \hline \end{array}$  |
| 4. | $\begin{array}{r} 54 \\ - 6 \\ \hline \end{array}$  | $\begin{array}{r} 654 \\ - 91 \\ \hline \end{array}$  | $\begin{array}{r} 7932 \\ - 1049 \\ \hline \end{array}$ | $\begin{array}{r} 46246 \\ - 7292 \\ \hline \end{array}$  | $\begin{array}{r} 401263 \\ - 329104 \\ \hline \end{array}$ |
| 5. | $\begin{array}{r} 77 \\ - 67 \\ \hline \end{array}$ | $\begin{array}{r} 327 \\ - 144 \\ \hline \end{array}$ | $\begin{array}{r} 7213 \\ - 846 \\ \hline \end{array}$  | $\begin{array}{r} 92719 \\ - 81041 \\ \hline \end{array}$ | $\begin{array}{r} 612910 \\ - 104763 \\ \hline \end{array}$ |
| 6. | $\begin{array}{r} 46 \\ - 7 \\ \hline \end{array}$  | $\begin{array}{r} 801 \\ - 629 \\ \hline \end{array}$ | $\begin{array}{r} 1497 \\ - 546 \\ \hline \end{array}$  | $\begin{array}{r} 51927 \\ - 4307 \\ \hline \end{array}$  | $\begin{array}{r} 729040 \\ - 81065 \\ \hline \end{array}$  |

# Multiplication

Multiply the top number by the bottom number. Use 4 steps.

$$\begin{array}{r}
 \text{factors } \left\{ \begin{array}{r} 4376 \\ \times 642 \\ \hline 8752 \\ 175040 \\ + 2625600 \\ \hline 2809392 \end{array} \right. \\
 \text{Product} \longrightarrow
 \end{array}
 \begin{array}{l}
 (1. 4376 \times 2) \\
 (2. 4376 \times 40) \\
 (3. 4376 \times 600) \\
 (4. \text{Add})
 \end{array}$$

Multiply

$$\begin{array}{l}
 1. \quad \begin{array}{r} \text{a} \\ 29 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} \text{b} \\ 57 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} \text{c} \\ 371 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} \text{d} \\ 476 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} \text{e} \\ 1432 \\ \times 9 \\ \hline \end{array}
 \end{array}$$

$$2. \quad \begin{array}{r} 18 \\ \times 77 \\ \hline \end{array} \quad \begin{array}{r} 84 \\ \times 92 \\ \hline \end{array} \quad \begin{array}{r} 747 \\ \times 36 \\ \hline \end{array} \quad \begin{array}{r} 107 \\ \times 18 \\ \hline \end{array} \quad \begin{array}{r} 4704 \\ \times 4 \\ \hline \end{array}$$

$$3. \quad \begin{array}{r} 57 \\ \times 27 \\ \hline \end{array} \quad \begin{array}{r} 5072 \\ \times 65 \\ \hline \end{array} \quad \begin{array}{r} 339 \\ \times 81 \\ \hline \end{array} \quad \begin{array}{r} 2216 \\ \times 52 \\ \hline \end{array} \quad \begin{array}{r} 6790 \\ \times 25 \\ \hline \end{array}$$

$$4. \quad \begin{array}{r} 371 \\ \times 403 \\ \hline \end{array} \quad \begin{array}{r} 463 \\ \times 369 \\ \hline \end{array} \quad \begin{array}{r} 4276 \\ \times 483 \\ \hline \end{array} \quad \begin{array}{r} 5312 \\ \times 811 \\ \hline \end{array} \quad \begin{array}{r} 2897 \\ \times 632 \\ \hline \end{array}$$

## Division

$$\begin{array}{r} 424 \overline{) 91472} \end{array}$$

The divisor is 3 digits. The first digit in the quotient will be in the hundreds place.

$$\begin{array}{r} 424 \text{ fits} \\ \text{into } 424 \overline{) 91472} \\ 914 \\ \text{about 2} \\ \text{times.} \end{array}$$

$$\begin{array}{r} 424 \text{ fits} \\ \text{into } 424 \overline{) 91472} \\ 667 \\ \text{only} \\ \text{once.} \end{array}$$

$$\begin{array}{r} 21 \\ 424 \overline{) 91472} \\ - 848 \\ \hline 667 \\ - 424 \\ \hline 2432 \end{array}$$

$$\begin{array}{r} 424 \text{ fits} \\ \text{into } 424 \overline{) 91472} \\ 2432 \\ \text{about 5} \\ \text{times.} \end{array}$$

Remainder  $\rightarrow$  312

Divide. Include the remainder in your answer.

a

$$1. \quad 6 \overline{) 479}$$

b

$$27 \overline{) 481}$$

c

$$119 \overline{) 865}$$

d

$$8 \overline{) 1699}$$

$$2. \quad 8 \overline{) 915}$$

$$45 \overline{) 848}$$

$$201 \overline{) 976}$$

$$9 \overline{) 4793}$$

$$3. \quad 4 \overline{) 54672}$$

$$6 \overline{) 14757}$$

$$27 \overline{) 11973}$$

$$81 \overline{) 41262}$$

$$4. \quad 42 \overline{) 1247}$$

$$81 \overline{) 9076}$$

$$106 \overline{) 53727}$$

$$9 \overline{) 4279}$$



## Adding and Subtracting Decimals

Add o's if they help you. Add.

$$\begin{array}{r} 19.475 \\ 7.3403 \\ + 25.05 \\ \hline \end{array}$$

$$\begin{array}{r} \overset{2}{1}9.\overset{1}{4}750 \\ 7.3403 \\ + 25.0500 \\ \hline 51.8653 \end{array}$$

Add o's if they help you. Subtract.

$$\begin{array}{r} 721.03 \\ + 64.9725 \\ \hline \end{array}$$

$$\begin{array}{r} \overset{6}{7}2\overset{1}{1}.\overset{10}{0}\overset{12}{3}\overset{9}{0}\overset{10}{0} \\ + 64.9725 \\ \hline 656.0575 \end{array}$$

Line up the decimal point in the answer with the decimal points in the problem.

Add or subtract.

- |    | a  | b   | c   | d  | e  |
|----|--|---|---|--|--|
| 1. | $\begin{array}{r} 45.3 \\ + 9.7 \\ \hline \end{array}$       | $\begin{array}{r} 1.213 \\ - 0.906 \\ \hline \end{array}$         | $\begin{array}{r} 137.56 \\ + 54.09 \\ \hline \end{array}$          | $\begin{array}{r} 15.074 \\ - 7.835 \\ \hline \end{array}$         | $\begin{array}{r} 672.91 \\ - 501.504 \\ \hline \end{array}$           |
| 2. | $\begin{array}{r} 1.02 \\ + 0.73 \\ \hline \end{array}$      | $\begin{array}{r} 4.262 \\ + 4.105 \\ \hline \end{array}$         | $\begin{array}{r} 47.052 \\ - 8.76 \\ \hline \end{array}$           | $\begin{array}{r} 9.056 \\ - 4.7175 \\ \hline \end{array}$         | $\begin{array}{r} 59.0745 \\ + 7.554 \\ \hline \end{array}$            |
| 3. | $\begin{array}{r} 4.33 \\ - 1.79 \\ \hline \end{array}$      | $\begin{array}{r} 15.65 \\ - 9.4 \\ \hline \end{array}$           | $\begin{array}{r} 501.37 \\ - 107.5 \\ \hline \end{array}$          | $\begin{array}{r} 4.2374 \\ + 0.8104 \\ \hline \end{array}$        | $\begin{array}{r} 775.035 \\ - 69.67 \\ \hline \end{array}$            |
| 4. | $\begin{array}{r} 12.7 \\ - 6.9 \\ \hline \end{array}$       | $\begin{array}{r} 37.76 \\ + 12.55 \\ \hline \end{array}$         | $\begin{array}{r} 9.2164 \\ + 5.105 \\ \hline \end{array}$          | $\begin{array}{r} 127.08 \\ - 104.2 \\ \hline \end{array}$         | $\begin{array}{r} 12.07 \\ - 9.4365 \\ \hline \end{array}$             |
| 5. | $\begin{array}{r} 12.3 \\ 9.4 \\ + 45 \\ \hline \end{array}$ | $\begin{array}{r} 1.045 \\ 0.12 \\ + 3.675 \\ \hline \end{array}$ | $\begin{array}{r} 44.045 \\ 9.15 \\ + 17.381 \\ \hline \end{array}$ | $\begin{array}{r} 62.75 \\ 19.063 \\ + 44.6 \\ \hline \end{array}$ | $\begin{array}{r} 421.0613 \\ 19.84 \\ + 107.44 \\ \hline \end{array}$ |