

8. [Decimal +,-]

Skill 8.1 Adding decimal numbers without carry over.

MMBlue 1 1 2 2 3 3 4 4
MMGreen 1 2 3 4

When adding decimals always line up the decimal points in the question and write a decimal point directly underneath for your answer. All working is from right to left.

Q. $42.31 + 16.57 =$

A.
$$\begin{array}{r} 42.31 \\ + 16.57 \\ \hline 58.88 \end{array}$$

Line up the decimal point for your answer with the decimal points in the question. Work from right to left.

Add the hundredths: $1 + 7 = 8$

Add the tenths: $3 + 5 = 8$

Add the units: $2 + 6 = 8$

Add the tens: $4 + 1 = 5$

a) $4.8 + 1.1 =$

$$\begin{array}{r} 4.8 \\ + 1.1 \\ \hline 5.9 \end{array}$$

b) $5.6 + 2.3 =$

$$\begin{array}{r} 5.6 \\ + 2.3 \\ \hline \end{array}$$

c) $9.4 + 0.2 =$

$$\begin{array}{r} 9.4 \\ + 0.2 \\ \hline \end{array}$$

d) $2.63 + 2.25 =$

$$\begin{array}{r} 2.63 \\ + 2.25 \\ \hline \end{array}$$

e) $4.51 + 0.15 =$

$$\begin{array}{r} 4.51 \\ + 0.15 \\ \hline \end{array}$$

f) $13.7 + 54.2 =$

$$\begin{array}{r} 13.7 \\ + 54.2 \\ \hline \end{array}$$

g) $47.1 + 21.8 =$

$$\begin{array}{r} 47.1 \\ + 21.8 \\ \hline \end{array}$$

h) $59.4 + 20.3 =$

$$\begin{array}{r} 59.4 \\ + 20.3 \\ \hline \end{array}$$

i) $3.06 + 34.2 =$

$$\begin{array}{r} 3.06 \\ + 34.2 \\ \hline \end{array}$$

j) $2.43 + 67.5 =$

$$\begin{array}{r} 2.43 \\ + 67.5 \\ \hline \end{array}$$

k) $1.59 + 28.2 =$

$$\begin{array}{r} 1.59 \\ + 28.2 \\ \hline \end{array}$$

l) $7.36 + 62.5 =$

$$\begin{array}{r} 7.36 \\ + 62.5 \\ \hline \end{array}$$

m) $40.01 + 56.87 =$

$$\begin{array}{r} 40.01 \\ + 56.87 \\ \hline \end{array}$$

n) $21.12 + 42.23 =$

$$\begin{array}{r} 21.12 \\ + 42.23 \\ \hline \end{array}$$

o) $8.047 + 0.342 =$

$$\begin{array}{r} 8.047 \\ + 0.342 \\ \hline \end{array}$$

p) $6.502 + 0.393 =$

$$\begin{array}{r} 6.502 \\ + 0.393 \\ \hline \end{array}$$

When subtracting decimals always line up the decimal points in the question and write a decimal point directly underneath for your answer. All working is from right to left.

Q. $6.39 - 5.04 =$

A.
$$\begin{array}{r} 6.39 \\ - 5.04 \\ \hline 1.35 \end{array}$$

Line up the decimal point for your answer with the decimal points in the question. Work from right to left.

Subtract the hundredths: $9 - 4 = 5$

Subtract the tenths: $3 - 0 = 3$

Subtract the units: $6 - 5 = 1$

a) $7.5 - 2.4 =$

$$\begin{array}{r} 7.5 \\ - 2.4 \\ \hline 5.1 \end{array}$$

b) $5.7 - 3.7 =$

$$\begin{array}{r} 5.7 \\ - 3.7 \\ \hline \end{array}$$

c) $6.9 - 1.7 =$

$$\begin{array}{r} 6.9 \\ - 1.7 \\ \hline \end{array}$$

d) $8.59 - 2.08 =$

$$\begin{array}{r} 8.59 \\ - 2.08 \\ \hline \end{array}$$

e) $5.85 - 0.33 =$

$$\begin{array}{r} 5.85 \\ - 0.33 \\ \hline \end{array}$$

f) $4.92 - 0.71 =$

$$\begin{array}{r} 4.92 \\ - 0.71 \\ \hline \end{array}$$

g) $3.64 - 2.03 =$

$$\begin{array}{r} 3.64 \\ - 2.03 \\ \hline \end{array}$$

h) $6.75 - 3.44 =$

$$\begin{array}{r} 6.75 \\ - 3.44 \\ \hline \end{array}$$

i) $18.7 - 4.3 =$

$$\begin{array}{r} 18.7 \\ - 4.3 \\ \hline \end{array}$$

j) $98.7 - 54.2 =$

$$\begin{array}{r} 98.7 \\ - 54.2 \\ \hline \end{array}$$

k) $37.92 - 4.8 =$

$$\begin{array}{r} 37.92 \\ - 4.8 \\ \hline \end{array}$$

l) $91.99 - 90.9 =$

$$\begin{array}{r} 91.99 \\ - 90.9 \\ \hline \end{array}$$

m) $76.84 - 23.83 =$

$$\begin{array}{r} 76.84 \\ - 23.83 \\ \hline \end{array}$$

n) $4.937 - 0.605 =$

$$\begin{array}{r} 4.937 \\ - 0.605 \\ \hline \end{array}$$

o) $3.691 - 0.57 =$

$$\begin{array}{r} 3.691 \\ - 0.57 \\ \hline \end{array}$$

p) $9.735 - 2.503 =$

$$\begin{array}{r} 9.735 \\ - 2.503 \\ \hline \end{array}$$

Skill 8.3 Adding two decimal numbers with carry over.

When adding decimals always line up the decimal points in the question and write a decimal point directly underneath for your answer. All working is from right to left.

Q. $54.07 + 6.48 =$

A.
$$\begin{array}{r} \overset{1}{5} \overset{1}{4} . 0 7 \\ + 6 . 4 8 \\ \hline 6 0 . 5 5 \end{array}$$

Add the hundredths: $7 + 8 = 15$. Write the 5 under the hundredths column and carry over the 10 hundredths or 1 group of tenths over to the tenths column.

Add the tenths: $0 + 4 + 1 = 5$

Add the units: $4 + 6 = 10$ Write the 0 under the units column and "carry" the 1 ten over to the tens column.

Add the tens: $5 + 0 + 1 = 6$

a) $5.5 + 1.8 =$

$$\begin{array}{r} \overset{1}{5} . 5 \\ + 1 . 8 \\ \hline 7 . 3 \end{array}$$

b) $3.7 + 3.4 =$

$$\begin{array}{r} 3 . 7 \\ + 3 . 4 \\ \hline \end{array}$$

c) $9.4 + 0.69 =$

$$\begin{array}{r} 9 . 4 \\ + 0 . 6 9 \\ \hline \end{array}$$

d) $7.39 + 2.81 =$

$$\begin{array}{r} 7 . 3 9 \\ + 2 . 8 1 \\ \hline \end{array}$$

e) $4.25 + 3.27 =$

$$\begin{array}{r} 4 . 2 5 \\ + 3 . 2 7 \\ \hline \end{array}$$

f) $6.33 + 12.9 =$

$$\begin{array}{r} 6 . 3 3 \\ + 1 2 . 9 \\ \hline \end{array}$$

g) $65.4 + 18.5 =$

$$\begin{array}{r} 6 5 . 4 \\ + 1 8 . 5 \\ \hline \end{array}$$

h) $43.5 + 26.5 =$

$$\begin{array}{r} 4 3 . 5 \\ + 2 6 . 5 \\ \hline \end{array}$$

i) $17.4 + 20.7 =$

$$\begin{array}{r} 1 7 . 4 \\ + 2 0 . 7 \\ \hline \end{array}$$

j) $3.77 + 18.9 =$

$$\begin{array}{r} 3 . 7 7 \\ + 1 8 . 9 \\ \hline \end{array}$$

k) $56.72 + 7.94 =$

$$\begin{array}{r} 5 6 . 7 2 \\ + 7 . 9 4 \\ \hline \end{array}$$

l) $4.178 + 2.77 =$

$$\begin{array}{r} 4 . 1 7 8 \\ + 2 . 7 7 \\ \hline \end{array}$$

m) $0.013 + 0.13 =$

$$\begin{array}{r} 0 . 0 1 3 \\ + 0 . 1 3 \\ \hline \end{array}$$

n) $5.902 + 2.47 =$

$$\begin{array}{r} 5 . 9 0 2 \\ + 2 . 4 7 \\ \hline \end{array}$$

o) $5 + 1.4 + 3.78 =$

$$\begin{array}{r} 5 . 0 \\ 1 . 4 \\ + 3 . 7 8 \\ \hline \end{array}$$

p) $7.8 + 6.43 + 3.8 =$

$$\begin{array}{r} 7 . 8 \\ 6 . 4 3 \\ + 3 . 8 \\ \hline \end{array}$$

When subtracting decimals always line up the decimal points in the question and write a decimal point directly underneath for your answer. All working is from right to left.

Q. $29.57 - 6.38 =$ **A.**
$$\begin{array}{r} 29.\overset{4}{\cancel{5}}7 \\ - 6.38 \\ \hline 23.19 \end{array}$$

8 hundredths can not be subtracted from 7 hundredths and give a positive answer, so break down the 5 tenths into 4 tenths and 10 hundredths. Add the 10 hundredths to the 7 hundredths to make 17 hundredths.
Subtract the hundredths: $17 - 8 = 9$ Write the 9 under the hundredths column.

Subtract the tenths: $4 - 3 = 1$
Subtract the units: $9 - 6 = 3$
Subtract the tens: $2 - 0 = 2$

a) $7.3 - 2.4 =$

$$\begin{array}{r} \overset{6}{\cancel{7}}.3 \\ - 2.4 \\ \hline 4.9 \end{array}$$

b) $9.0 - 5.4 =$

$$\begin{array}{r} 9.0 \\ - 5.4 \\ \hline \dots \dots \end{array}$$

c) $8.6 - 3.7 =$

$$\begin{array}{r} 8.6 \\ - 3.7 \\ \hline \dots \dots \end{array}$$

d) $5.5 - 3.8 =$

$$\begin{array}{r} 5.5 \\ - 3.8 \\ \hline \dots \dots \end{array}$$

e) $5.65 - 3.7 =$

$$\begin{array}{r} 5.65 \\ - 3.7 \\ \hline \dots \dots \end{array}$$

f) $4.35 - 0.29 =$

$$\begin{array}{r} 4.35 \\ - 0.29 \\ \hline \dots \dots \end{array}$$

g) $7.44 - 0.16 =$

$$\begin{array}{r} 7.44 \\ - 0.16 \\ \hline \dots \dots \end{array}$$

h) $12.5 - 0.72 =$

$$\begin{array}{r} 12.5 \\ - 0.72 \\ \hline \dots \dots \end{array}$$

i) $56.32 - 7.04 =$

$$\begin{array}{r} 56.32 \\ - 7.04 \\ \hline \dots \dots \end{array}$$

j) $26.37 - 8.3 =$

$$\begin{array}{r} 26.37 \\ - 8.3 \\ \hline \dots \dots \end{array}$$

k) $93.66 - 4.37 =$

$$\begin{array}{r} 93.66 \\ - 4.37 \\ \hline \dots \dots \end{array}$$

l) $53.73 - 6.23 =$

$$\begin{array}{r} 53.73 \\ - 6.23 \\ \hline \dots \dots \end{array}$$

m) $8.406 - 0.846 =$

$$\begin{array}{r} 8.406 \\ - 0.846 \\ \hline \dots \dots \end{array}$$

n) $7.555 - 3.93 =$

$$\begin{array}{r} 7.555 \\ - 3.93 \\ \hline \dots \dots \end{array}$$

o) $2.084 - 0.937 =$

$$\begin{array}{r} 2.084 \\ - 0.937 \\ \hline \dots \dots \end{array}$$

p) $7.909 - 0.052 =$

$$\begin{array}{r} 7.909 \\ - 0.052 \\ \hline \dots \dots \end{array}$$