# Adding, Subtracting, Multiplying, and Dividing Decimals

Name: **Key**

Date: _____

**B** 1.  Find the sum: $4.2 + 0.13 + 0.072$

A.  0.0622

**B.  4.402**

C.  6.22

D.  44.02

$$
\begin{array}{r}
4.200 \\
0.130 \\
+\ 0.072 \\
\hline
4.402
\end{array}
$$

**A** 2.  Find the correct product: $0.034 \times 52.7$

**A.  1.7918**

B.  5.3819

C.  53.819

D.  179.18

$$
\begin{array}{r}
527 \\
\times\ 34 \\
\hline
2108 \\
+\ 1581\ \odot \\
\hline
1.7918
\end{array}
$$

**A** 3.  Simplify: $75.060 \div 15$

**A.  5.004**   B.  5.4   C.  50.4   D.  5004

$$
15\overline{)75.060}
\quad = 5.004
$$

**B** 4.  Find the quotient: $0.06\overline{)0.522}$

A.  6.8   **B.  8.7**   C.  68   D.  87

$$
6\overline{)52.2}
\quad = 8.7
$$

**D** 5.  The Pitzer family consists of two parents, Ruby, age 13, and Martin, age 8.  The family bought movie tickets.

**Movie Tickets**

| Age | Price |
| --- | --- |
| Adult | $10.75 |
| Child 12 and under | $8.50 |

How much did the family pay altogether for the tickets?

A.  $19.25

B.  $38.50

C.  $47.00

**D.  none of these**

$$
\begin{array}{r}
10.75 \\
10.75 \\
10.75 \\
+\ 08.50 \\
\hline
\$40.75
\end{array}
$$

**B** 6.  Jason's batting average is 0.165.  If he doubles this average, what will be his new average?

A.  0.065

**B.  0.330**

C.  6.8000

D.  10.000

$$
\begin{array}{r}
165 \\
\times\ 2 \\
\hline
.330
\end{array}
$$

**B** 7.  Sheli and Kien were washing cars for their neighbors.  They decided to put their earnings together and then share it equally.  Sheli earned $15.40 and Kien earned $17.90.  How much money did each person get?

A.  $16.50

**B.  $16.65**

C.  $32.50

D.  $33.30

$$
\begin{array}{r}
15.40 \\
+\ 17.90 \\
\hline
33.30
\end{array}
\qquad
2\overline{)33.30} = 16.65
$$

*B* 8. Gary needs to buy new socks. The kind he wants are advertised at 6 pairs for $16.50. Gary only wants to buy 2 pairs. How much will he have to pay, before tax?

A.   $4.13          B.   $5.50

C.   $8.25          D.   none of these

```
      5.50
   3│16.50
    -15↓
      15
     -15↓
       00
      - 0
        0
```

9.    8   72  (5.9)  47   39.89
      45.8  100  66.087  (0.0765)

Find two factors that would result in a product less than 1. Explain your answer.

```
     -53x2
      765
   ×   59
   ┌──────
    6895
 + 3825☺
  ────────
  .45145
```

You need the 2 smallest #s.

*B* 10. A sixth-grade class is growing plants for their science projects. Each student spent $1.00 for a package of seeds and $2.50 for a container to plant the seeds in. There are 30 students in the class. How much money did the sixth-grade class spend on seeds and containers in all?

A.   $3.50          B.   $105.00

C.   $165.00        D.   $255.00

```
       35
    ×  30
   ──────
       00
    105☺
   ──────
   $105.00
```

*D* 11. When Lily was 7 years old, she earned an allowance of $2.00 each week. Every year, her parents give her a raise of $0.50 a week. If this rate continues, what will Lily's allowance be when she is 11 years old?

A.   $2.00 each week      B.   $2.50 each week

C.   $3.50 each week      D.   $4.00 each week

```
       50
     × 4
   ──────
     2.00
```

*C* 12. What is the correct placement of the decimal point in the product of the problem below?

```
   1.234  ← 3 dec. places    * Take 0 off
 ×  0.90  ← 2 dec. places       the end... so
 ┌──────                        4 dec. places.
   + ────────
   5 dec. places in answer
```

A.   111.06   B.   11.106   C.   1.1106   D.   .11106

**B** 13. Peyton was given the division problem below to work.

$$1.7\overline{)1.75}$$

Her work is shown below.

Step 1  $17,\overline{)1.75}$

Step 2  $17.\overline{)1\;175}$

Step 3  $17.\overline{)175}^{\;.1}$

Step 4  $17.\overline{)175}^{\;.10}$

At which step did Peyton make her first mistake?

A. Step 1  **B. Step 2**

C. Step 3  D. Step 4

**B** 14. Mr. Nabors bought 3 books for $3.57. He also bought a pen for $2.50. What was the cost of one book?

A. $1.04  **B. $1.19**  C. $1.25  D. $1.32

$$3\overline{)3.57}^{\;1.19}$$
$$-3$$
$$05$$
$$-3$$
$$27$$
$$-27$$
$$0$$

**C** 15. A one-gallon can of paint costs $8.67. A five-gallon can of paint costs $41.15. How much will a painter save if she buys the five-gallon can rather than five one-gallon cans?

2 ways

A. $1.80  B. $1.96  **C. $2.20**  D. $2.50

$$\begin{array}{r}867\\\times\;5\\\hline 4335\end{array}$$

$$\begin{array}{r}43.35\\-41.15\\\hline 2.20\end{array}$$

$$5\overline{)41.15}^{\;8.23}$$
$$-40$$
$$11$$
$$-10$$
$$15$$
$$-15$$
$$0$$

$$\begin{array}{r}8.67\\-8.23\\\hline 0.44\end{array}\leftarrow\text{per can}$$

$$\begin{array}{r}.44\\\times\;5\\\hline 2.20\end{array}$$

---

**A LOT** of work for this problem!

**A** 16. The grocery store sold milk for $1.89 a gallon, raisins for $0.89 a box, and crackers for $1.59 a box. Mary bought at least one of each and spent $8.04. What did she buy?

A: 
$$\begin{array}{r}3.78\\2.67\\+\;1.59\\\hline 8.04\end{array}$$

**A.** 2 gallons of milk, 3 boxes of raisins, 1 box of crackers
$3.78     $2.67     $1.59

B. 3 gallons of milk, 1 box of raisins, 1 box of crackers
$5.67     $0.89     $1.59

C. 1 gallon of milk, 2 boxes of raisins, 3 boxes of crackers
$1.89     $1.78     $4.77

D. 2 gallons of milk, 2 boxes of raisins, 2 boxes of crackers
$3.78     $1.78     $3.18

| | | | |
|---|---|---|---|
| milk | $1.89 | $3.78 | $5.67 |
| raisins | $0.89 | $1.78 | $2.67 |
| crackers | $1.59 | $3.18 | $4.77 |

$$\begin{array}{r}1.89\\\times\;2\\\hline 3.78\end{array}\quad\begin{array}{r}89\\\times\;2\\\hline 1.78\end{array}①\quad\begin{array}{r}159\\\times\;2\\\hline 3.18\end{array}\quad\begin{array}{r}189\\\times\;3\\\hline 5.67\end{array}②\quad\begin{array}{r}89\\\times\;3\\\hline 2.67\end{array}\quad\begin{array}{r}159\\\times\;3\\\hline 4.77\end{array}③$$

**D** 17. The price of a theater ticket increased from $7.50 to $7.75. The theater sold 315 tickets at the higher price.

With the price increase, how much more did the theater earn on the tickets?

A. $78.00  B. $78.25

C. $78.50  **D. $78.75**

$0.25 more per ticket, so…

$$\begin{array}{r}315\\\times\;25\\\hline 1575\\630\\\hline 78.75\end{array}$$

18. Janelle bought 3 pens for $2.25. You bought 5 pencils for $2.95.

a) How much does 1 pencil cost?  **$0.59**

b) How much does 1 pen cost?  **$0.75**

$$5\overline{)2.95}^{\;0.59}$$
$$-25$$
$$45$$
$$-45$$
$$0$$

$$3\overline{)2.25}^{\;0.75}$$
$$-21$$
$$15$$
$$-15$$
$$0$$

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*B* 19. Jerry is planning to buy a stereo system priced at $840 through an installment plan. This plan requires a down payment of $190 and 24 monthly payments of $32.35.

How much more will Jerry pay for the stereo system by using the installment plan rather than paying cash?

A. $63.60

B. $126.40

C. $253.60

D. $650.00

$$\begin{array}{r} \overset{+\ \overset{7}{}1}{3\overset{1}{2}35} \\ \times\ 24 \\ \hline 12940 \\ +\ 6470\ ☺ \\ \hline 776.40 \end{array}$$

$$\begin{array}{r} 776.40 \\ +190.00 \\ \hline 966.40 \end{array}$$

$$\begin{array}{r} 966.40 \\ -\ 840.00 \\ \hline \boxed{126.40} \end{array}$$

*D* 20. A 6-ounce box of strawberry gelatin costs $0.90 and a 3-ounce box costs $0.42. What is the difference in cost per ounce between the larger and the smaller boxes?

A. $0.48   B. $0.04   C. $0.03   D. $0.01

Larger

$$\begin{array}{r} .15 \\ 6\overline{)\,.90} \\ -6\!\downarrow \\ \hline 30 \\ -30 \\ \hline 0 \end{array}$$

Smaller

$$\begin{array}{r} .14 \\ 3\overline{)\,.42} \\ -3\!\downarrow \\ \hline 12 \\ -12 \\ \hline 0 \end{array}$$

Difference

$$\begin{array}{r} .15 \\ -.14 \\ \hline .01 \end{array}$$

Adding, Subtracting, Multiplying, and Dividing Decimals

# Adding, Subtracting, Multiplying, and Dividing Decimals Practice

1) Jan bought four books for the following prices: $3.95, $2.95, $5.00, and $0.95. She gave the clerk her money and received $2.15 back in change. How much money did Jan give the clerk? **$15.00**

```
  2  1
  3.95
  2.95
  5.00
+ 0.95
------
 12.85
+ 2.15
------
 15.00
```

2) Marcus bought 2 cases of canned green beans.

- Each case has 24 cans.
- Each can of green beans costs $0.74, including tax.

How much did Marcus spend on green beans? **$35.52**

```
  ⁵¹
   74
 x 48
-----
 .592
 29 6
-----
 35.52
```

3) A school store buys pencils for $0.15 each.

- It sells the pencils for $0.22 each.
- The store sold 4 dozen pencils last week. = 28

How much profit did the school store make from pencils? **$1.96**

Profit = $ made. If they buy for $0.15 and sell for $0.22, that = $0.07 profit per pencil.

```
  ⁵28
 x  7
-----
 1.96
```

4) Jacob had $340.87 in his checking account. He withdrew $52.00 and wrote a check for $18.72. He made a deposit for $75.37. Find his new balance. took out (–) put in (+) **$345.52**

```
 13 10
 2 3⁄40.87
 -  52.00
 --------
  288.87
 -  18.72
 --------
  270.15
 +  75.37
 --------
  345.52
```

5) The Henry family drove 276.5 miles on the family vacation. They used 7.9 gallons of gas. How many miles per gallon of gas did they get on the trip? 276.5 ÷ 7.9 **35 miles per gallon**

```
      35.
 79)2765.⁵
  -237↓
  ----
   395
  -395
  ----
     0
```

```
  ³79      ⁴79
 x  3     x  5
 ----     ----
  237      395
```

6) Subtract 10.0075 from 18.2. **8.1925**

```
      ⁹ ⁹ ¹⁰
 18.2⁄0⁄0⁄0⁄
 -10.0075
 --------
  8.1925
```

7) George lives 0.25 miles away from school. How far will he walk altogether if he walks to school and back for 5 days? **2.5 miles**

1 Day = 0.25

```
  0.25
 +0.25
 -----
  0.50
```

```
    5
  x 5
 ----
  25
```

4 total people

8) Kevin and his three best friends went to a Jacksonville Jaguars game. The cab ride from the hotel, to the stadium costs $1.85 per person. In addition, the cab ride will cost $1.15 per 0.5 mile. The total distance from the hotel to the stadium is two miles. How much would each person pay if they split the cost evenly? **$3.00 per person**

How many 0.5 miles are in the 2 miles distance?

2 ÷ 0.5

```
    4
 5)20
 -20
 ---
   0
```

```
   ²
  1 1 5
 x   4
 ------
  4.6 OR total for cab ride
```

Split between 4 people = $1.15 per person.

```
  ¹ ¹
  1.85
 +1.15
 -----
  3.00
```

$$2.33$$
$$+4.25$$
$$\overline{6.58}$$

9) A band can play as much as 8 minutes of music in a competition. If the band plays a 2.33 minute song and a 4.25 minute song, how many minutes does the band have left?

$$\overset{9\ 10}{7\cancel{8}.\cancel{0}\cancel{0}}$$
$$-\ 6.58$$
$$\overline{1\ .\ 4\ 2}$$

(1.42 min.)

10) Sarah spent a total of $18.00 on rides at the county fair. Each ride cost $1.50. How many rides did Sarah go on at the fair?  $18 \div 1.5$

(12)

$$\begin{array}{r} 12 \\ 15\overline{)180} \\ -15\downarrow \\ \overline{\phantom{0}30} \\ -30 \\ \overline{\phantom{00}0} \end{array}$$

11) If Michelle solved the following problem, what would be the correct answer?

$$\begin{array}{r} 2.25 \\ 12\overline{)27.00} \\ -24\downarrow \\ \overline{\phantom{0}3\ 0} \\ -24\downarrow \\ \overline{\phantom{00}60} \\ -60 \\ \overline{\phantom{000}0} \end{array}$$

$$127 \div 12 = (2.25)$$

12) Mrs. Phillips bought 1.5 pounds of ground beef from Kroger. She paid a total of $6.75 for the ground beef. What was the price per pound?  $6.75 \div 1.5$

$$\begin{array}{r} 4.5 \\ 15\overline{)67.5} \\ -60\downarrow \\ \overline{\phantom{0}75} \\ -75 \\ \overline{\phantom{00}0} \end{array}$$

you're dealing with $, so you need the hundredths place in your answer.

($4.50)