Extra practice—Adding decimals

Choose the right level for you – Bronze (mild), Silver (Spicy) or Gold (Hot).

dding decimals is exactly the same as adding other numbers.
ou can still use the method you would normally use.

1. Partitioning

$$\begin{array}{rl} 5.32 \longrightarrow & 5 + 0.3 + 0.02 \\ +4.83 \longrightarrow & 4 + 0.8 + 0.03 \\ \hline & 9 + 1.1 + 0.05 \longrightarrow 10.15 \end{array}$$

2. Standard method

$$\begin{array}{rl} 5.32 \longrightarrow & 5\ .\ 3\ 2 \\ +4.83 \longrightarrow & 4\ .\ 8\ 3 \\ \hline & \overset{1}{10}\ .\ 1\ 5 \longrightarrow 10.15 \end{array}$$

Solve these:

1. 2.4 + 3.3 =
2. 1.3 + 2.4 =
3. 3.2 + 2.5 =
4. 1.7 + 7.2 =
5. 1.5 + 5.2 =
6. 7.4 + 2.3 =
7. 5.1 + 3.7 =
8. 6.4 + 2.5 =
9. 4.4 + 5.3 =
10. 3.4 + 1.9 =
11. £7.20 + £1.50 =
12. £2.30 + £4.60 =
13. £6.60 + £3.20 =
14. £5.10 + £2.50 =
15. £3.80 + £1.30 =

Solve these:

1. 7.64 + 2.25 =
2. 2.91 + 4.04 =
3. 1.17 + 6.17 =
4. 3.22 + 5.27 =
5. 0.62 + 1.12 =
6. 2.28 + 4.63 =
7. 1.64 + 6.28 =
8. 5.14 + 2.56 =
9. 3.68 + 2.17 =
10. 6.24 + 2.19 =
11. £5.44 + £2.94 =
12. £6.62 + £3.60 =
13. £2.58 + £4.81 =
14. £2.61 + £5.94 =
15. £7.65 + £2.44 =

Solve these:

1. 7.44 + 2.71 =
2. 3.84 + 4.33 =
3. 3.52 + 4.63 =
4. 5.61 + 1.54 =
5. 4.83 + 1.95 =
6. 2.66 + 3.75 =
7. 6.97 + 1.45 =
8. 2.74 + 3.47 =
9. 1.86 + 6.35 =
10. 4.82 + 1.49 =
11. £2.75 + £3.47 =
12. £5.93 + £3.28 =
13. £1.83 + £4.27 =
14. £4.66 + £3.55 =
15. £7.76 + £2.37 =

Extra practice— Subtracting decimals

Choose the right level for you – Bronze (mild), Silver (Spicy) or Gold (Hot).

Subtracting decimals is exactly the same as subtracting other numbers. You can still use the method you would normally use.

1. Partitioning

6.45 → 6 + 0.4 + 0.05
−4.52 → 4 + 0.5 + 0.02
1 + 0.9 + 0.03 → 1.93

2. Standard method

6.45 → $5\not{6}\,.\,{}^{1}4\ 5$
−4.52 → 4 . 5 2
1 . 9 3 → 1.93

Solve these:

1. 9.9 − 7.2 =
2. 1.8 − 1.3 =
3. 6.8 − 4.3 =
4. 5.7 − 2.4 =
5. 4.7 − 2.4 =
6. 2.6 − 1.3 =
7. 7.4 − 4.3 =
8. 3.6 − 1.5 =
9. 4.6 − 2.6 =
10. 2.9 − 1.6 =
11. £6.58 − £3.25 =
12. £8.47 − £5.14 =
13. £5.48 − £4.13 =
14. £7.54 − £2.24 =
15. £5.58 − £1.37 =

Solve these:

1. 5.64 − 2.21 =
2. 6.47 − 4.15 =
3. 4.39 − 1.17 =
4. 6.94 − 5.22 =
5. 9.74 − 6.43 =
6. 2.94 − 1.77 =
7. 6.83 − 3.57 =
8. 3.36 − 1.55 =
9. 3.71 − 2.38 =
10. 8.38 − 2.47 =
11. £7.64 − £6.39 =
12. £2.44 − £1.63 =
13. £7.57 − £4.38 =
14. £8.50 − £6.42 =
15. £3.21 − £2.19 =

Solve these:

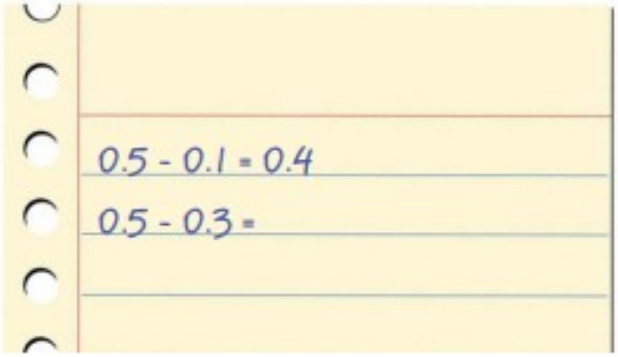
1. 7.63 − 4.07 =
2. 2.50 − 1.04 =
3. 7.21 − 6.02 =
4. 8.76 − 7.59 =
5. 7.97 − 4.89 =
6. 2.37 − 1.79 =
7. 6.54 − 2.68 =
8. 5.20 − 1.78 =
9. 5.41 − 2.54 =
10. 4.15 − 1.89 =
11. £6.06 − £4.77 =
12. £7.31 − £3.57 =
13. £6.23 − £1.64 =
14. £5.10 − £2.65 =
15. £8.00 − £4.87 =

Challenge

A Talisman Square has consecutive numbers. This one has the numbers 0.1 to 1.6. The difference between any two neighbouring numbers is always more than one unit, so here it is always greater than one tenth or 0.1

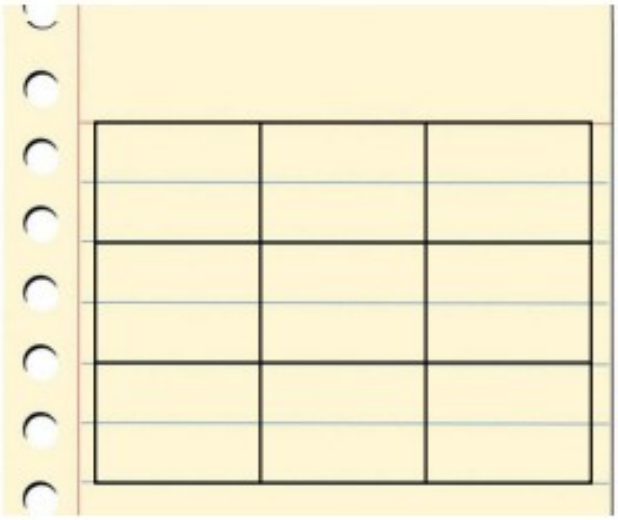
0.1	0.5	0.3	0.7
0.9	1.1	1.3	1.5
0.2	0.6	0.4	0.8
1	1.2	1.4	1.6

1. Find the difference between each pair of numbers along the top row of this square. So between 0.1 and 0.5, then between 0.5 and 0.3, then between 0.3 and 0.7, and so on.
2. Repeat this for the second row, and the third and fourth rows.
3. Now find the difference between each pair of numbers in the first column. So between 0.1 and 0.9, then between 0.9 and 0.2 and then between 0.2 and 1.
4. Repeat this for the second, third and fourth columns.



What is the greatest difference?
What is the smallest difference?
Are all the differences greater than 0.1?

5. Draw a 3 x 3 grid.
6. Use the numbers: 0.1, 0.2, 0.3... up to 0.9.
7. Can you arrange these on the grid to create a Talisman Square where all the neighbouring numbers have a difference greater than 0.1?



What do you notice?
Do you think this is possible?
Can you explain your answer?

Challenge

Create a new 4 x 4 grid, which is a Talisman Square using consecutive numbers. Remember that all the differences between neighbouring numbers must be greater than 0.1.