

Think about which method you are going to use to answer the following questions. Do you need to use a written method or can you solve it mentally?

Reds, we are counting on you to be efficient! Challenge: time yourself!

Adding Ones to a 3-Digit Number

Calculate the answers to the following:

- | | |
|-----------------------|-----------------------|
| 1. $136 + 3 =$ _____ | 13. $529 + 4 =$ _____ |
| 2. $212 + 4 =$ _____ | 14. $645 + 9 =$ _____ |
| 3. $381 + 6 =$ _____ | 15. $713 + 8 =$ _____ |
| 4. $494 + 5 =$ _____ | 16. $995 + 6 =$ _____ |
| 5. $533 + 4 =$ _____ | 17. $165 + 7 =$ _____ |
| 6. $620 + 7 =$ _____ | 18. $252 + 6 =$ _____ |
| 7. $725 + 4 =$ _____ | 19. $395 + 9 =$ _____ |
| 8. $952 + 7 =$ _____ | 20. $478 + 1 =$ _____ |
| 9. $165 + 8 =$ _____ | 21. $546 + 7 =$ _____ |
| 10. $224 + 7 =$ _____ | 22. $659 + 3 =$ _____ |
| 11. $388 + 6 =$ _____ | 23. $765 + 3 =$ _____ |
| 12. $478 + 5 =$ _____ | 24. $971 + 8 =$ _____ |

Challenge

Explain how you would use $7 + 8 = 15$ to calculate $537 + 8$.

Subtracting Ones from a 3-Digit Number

Calculate the answers to the following:

- | | |
|-----------------------|---------------------------|
| 1. $166 - 3 =$ _____ | 13. $571 - 5 =$ _____ |
| 2. $295 - 4 =$ _____ | 14. $678 - 9 =$ _____ |
| 3. $307 - 5 =$ _____ | 15. $722 - 6 =$ _____ |
| 4. $489 - 7 =$ _____ | 16. $982 - 4 =$ _____ |
| 5. $578 - 4 =$ _____ | 17. $122 - 6 =$ _____ |
| 6. $636 - 2 =$ _____ | 18. $279 -$ _____ $= 271$ |
| 7. $794 - 3 =$ _____ | 19. _____ $+ = 329$ |
| 8. $959 - 8 =$ _____ | 20. $459 - 3 =$ _____ |
| 9. $145 - 8 =$ _____ | 21. $566 +$ _____ $= 557$ |
| 10. $213 - 7 =$ _____ | 22. $659 - 4 =$ _____ |
| 11. $383 - 5 =$ _____ | 23. $779 - 5 =$ _____ |
| 12. $491 - 4 =$ _____ | 24. _____ $+ 8 = 944$ |

Challenge

Explain how you would use $14 - 8 = 6$ to calculate $384 - 8$.

Adding Tens to a 3-Digit Number

Calculate the answers to the following:

- | | |
|------------------------|---------------------------|
| 1. $153 + 30 =$ _____ | 13. $564 + 80 =$ _____ |
| 2. $272 + 20 =$ _____ | 14. $675 + 90 =$ _____ |
| 3. $301 + 60 =$ _____ | 15. $761 + 70 =$ _____ |
| 4. $413 + 70 =$ _____ | 16. $964 + 60 =$ _____ |
| 5. $523 + 40 =$ _____ | 17. $102 +$ _____ $= 172$ |
| 6. $630 + 20 =$ _____ | 18. $282 + 60 =$ _____ |
| 7. $737 + 50 =$ _____ | 19. _____ $+ 30 = 424$ |
| 8. $939 + 60 =$ _____ | 20. $488 + 40 =$ _____ |
| 9. $142 + 80 =$ _____ | 21. $537 + 90 =$ _____ |
| 10. $267 + 70 =$ _____ | 22. _____ $+ 30 = 686$ |
| 11. $398 + 60 =$ _____ | 23. $770 +$ _____ $= 850$ |
| 12. $451 + 50 =$ _____ | 24. $961 + 70 =$ _____ |

Challenge

Explain how you would use $7 + 8 = 15$ to calculate $537 + 8$.

Subtracting Tens from a 3-Digit Number

Calculate the answers to the following:

- | | |
|------------------------|---------------------------|
| 1. $178 - 30 =$ _____ | 13. $537 - 50 =$ _____ |
| 2. $282 - 40 =$ _____ | 14. $612 - 70 =$ _____ |
| 3. $377 - 50 =$ _____ | 15. $727 - 60 =$ _____ |
| 4. $495 - 70 =$ _____ | 16. $933 - 90 =$ _____ |
| 5. $581 - 40 =$ _____ | 17. $134 -$ _____ $= 74$ |
| 6. $625 - 20 =$ _____ | 18. $213 - 80 =$ _____ |
| 7. $767 - 50 =$ _____ | 19. _____ $- 70 = 276$ |
| 8. $992 - 80 =$ _____ | 20. $403 - 30 =$ _____ |
| 9. $131 - 80 =$ _____ | 21. _____ $- 90 = 486$ |
| 10. $224 - 60 =$ _____ | 22. $619 - 20 =$ _____ |
| 11. $357 - 90 =$ _____ | 23. $717 -$ _____ $= 647$ |
| 12. $413 - 30 =$ _____ | 24. $941 - 50 =$ _____ |

Challenge

Explain what other calculations you might use $13 - 8 = 5$.

Adding Hundreds to a 3-Digit Number

Calculate the answers to the following:

1. $163 + 500 =$ _____
2. $345 + 600 =$ _____
3. $582 + 400 =$ _____
4. $273 + 300 =$ _____
5. $561 + 200 =$ _____
6. $170 + 700 =$ _____
7. $207 + 500 =$ _____
8. $719 + 100 =$ _____
9. $372 + 800 =$ _____
10. $460 + 700 =$ _____
11. $508 + 900 =$ _____
12. $721 + 500 =$ _____
13. $549 + 800 =$ _____
14. $672 + 700 =$ _____
15. $701 + 900 =$ _____
16. $927 + 600 =$ _____
17. $116 + 700 =$ _____
18. $352 +$ _____ $= 1252$
19. _____ $+ 400 = 859$
20. $824 + 300 =$ _____
21. $562 + 900 =$ _____
22. _____ $+ 300 = 916$
23. $752 +$ _____ $= 1552$
24. $911 + 700 =$ _____

Challenge

Explain how you would use $9 + 4 = 13$ to calculate $931 + 400$.

Subtracting Hundreds from a Three Digit Number

Calculate the answers to the following:

- | | |
|------------------------|-------------------------|
| 1. $353 - 200 =$ _____ | 9. $268 - 200 =$ _____ |
| 2. $416 - 400 =$ _____ | 10. $416 - 100 =$ _____ |
| 3. $531 - 300 =$ _____ | 11. $547 - 300 =$ _____ |
| 4. $789 - 500 =$ _____ | 12. $346 - 100 =$ _____ |
| 5. $564 - 300 =$ _____ | 13. $564 - 400 =$ _____ |
| 6. $820 - 600 =$ _____ | 14. $893 - 600 =$ _____ |
| 7. $707 - 500 =$ _____ | 15. $507 - 500 =$ _____ |
| 8. $919 - 700 =$ _____ | 16. $919 - 400 =$ _____ |

Challenge

Take any three digit number. You can subtract 100, 200, 300 or 400 once each, but you must not go below 0.

e.g. $672 - 100 = 572$, $572 - 300 = 272$, $272 - 200 = 72$.
100, 300 and 200 were subtracted to get to 72.

Can you always get to a number between or equal to 100 and 1?

If you use as many subtractions as possible are there any patterns?

