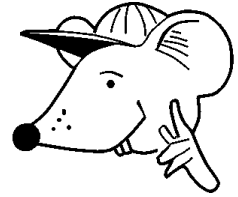




MATHEMATICS



N.S. Yr. 2 P.37

Add and subtract pairs of numbers mentally

Equipment

Paper, pencil, ruler

MathSphere

© MathSphere P.O. Box 1234 Worthing BN13 2UJ www.mathsphere.co.uk

Concepts

In year two children are not expected to cross the tens boundary when adding. This means that there is no 'carrying' into the tens.

Single digits can be added to multiples of ten, and later 100. For example $40 + 5 =$ or $100 + 6 =$. Much of this will be done mentally, but the number sentences can be written down. These can also be written as: $30 + \square = 35$

Single digits can be added to two digit numbers, such as $34 + 5$ or $26 + 3$.

Later, two digit numbers can be added to multiples of ten, such as $23 + 30$.

Subtraction of a single digit from a two digit number can be introduced, again with no crossing of the tens boundary, or 'borrowing'; sums such as $36 - 4$.

Subtraction of a single digit from a multiple of ten is expected in year 2 eg $30 - 7 =$ but again there are no formal written methods at this age.



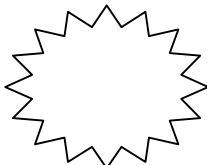
Once the above have been confidently mastered children can move on to subtracting teens from two digit numbers, but again with no crossing of the tens boundary.

Asking children how they do these 'in their heads' is still important and a range of possible ways should be discussed. The most efficient way is the one that should be encouraged – usually this means subtracting the tens digit first.



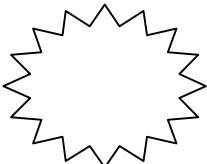



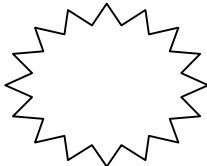
Hello. It's a very starry day today!
Write the answers in the stars.

Adding to two digits

1.  24 +  4 = 

2.  32 +  5 = 

3.  41 +  7 = 

4.  63 +  4 = 

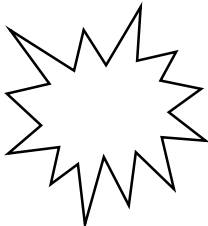
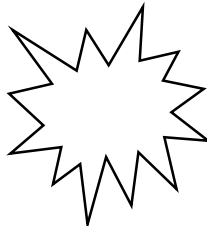
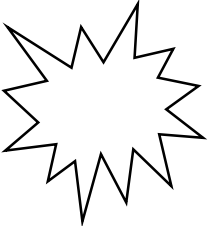
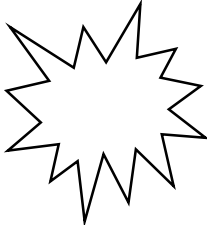
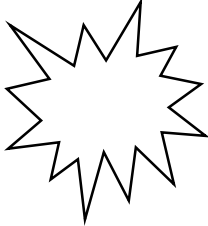
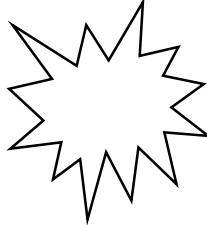
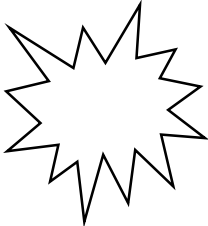
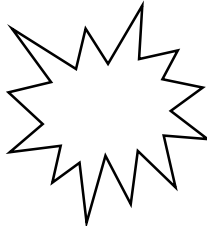
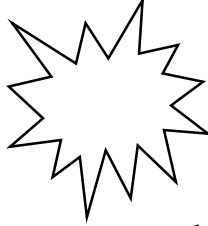
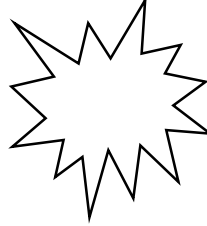
5.  86 +  3 = 





Got the idea of adding to two digits. Yes? Then try these:

Adding to two digits

- | | | | |
|---------------|---|----------------|---|
| 1. $13 + 6 =$ |  | 2. $25 + 4 =$ |  |
| 3. $32 + 7 =$ |  | 4. $44 + 2 =$ |  |
| 5. $51 + 8 =$ |  | 6. $63 + 5 =$ |  |
| 7. $72 + 6 =$ |  | 8. $83 + 4 =$ |  |
| 9. $92 + 5 =$ |  | 10. $95 + 2 =$ |  |

How many did you get right?





Quick ten additions
here.
Go for it!

Adding

1. $53 + 6 =$ 2. $47 + 2 =$

3. $73 + 5 =$ 4. $50 + 9 =$

5. $26 + 3 =$ 6. $35 + 4 =$

7. $61 + 6 =$ 8. $22 + 7 =$

9. $36 + 2 =$ 10. $31 + 8 =$

Colour a star for each sum you got right!





Another quick ten –
you should speed
through these!

Adding

1. $31 + 6 =$ 2. $25 + 4 =$

3. $42 + 3 =$ 4. $71 + 8 =$

5. $26 + 0 =$ 6. $55 + 3 =$

7. $91 + 8 =$ 8. $80 + 5 =$

9. $61 + 3 =$ 10. $26 + 1 =$

Colour a star for each sum you got right!



Subtraction

Subtraction, here
we go!



1. $48 - 3 =$ 2. $27 - 5 =$

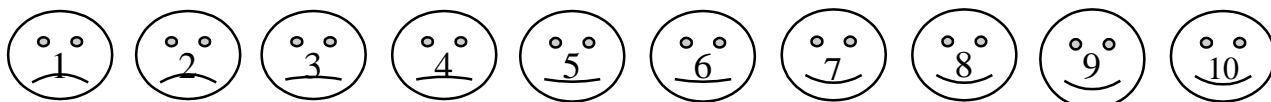
3. $68 - 4 =$ 4. $72 - 2 =$

5. $55 - 3 =$ 6. $79 - 8 =$

7. $87 - 5 =$ 8. $46 - 5 =$

9. $28 - 7 =$ 10. $39 - 2 =$

How well did you do? Colour how many you get correct.



Subtraction

Subtraction, try
some more!



1. $59 - 4 =$ 2. $38 - 6 =$

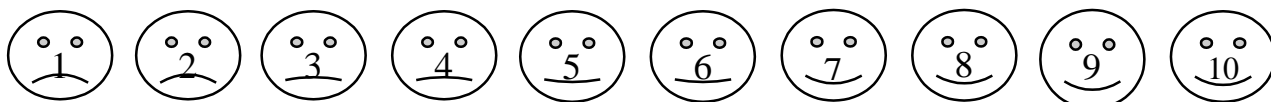
3. $49 - 8 =$ 4. $83 - 2 =$

5. $66 - 4 =$ 6. $89 - 8 =$

7. $98 - 6 =$ 8. $57 - 4 =$



9. $39 - 5 =$ 10. $46 - 5 =$



How well did you do? Colour how many you get correct.

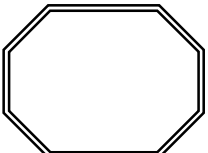



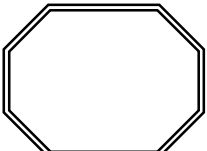

Adding



Try adding to these tens.
I bet you find them pretty
easy!

1. $20 + 5 =$  2. $30 + 4 =$ 

3. $40 + 4 =$  4. $50 + 8 =$ 

5. $60 + 1 =$  6. $70 + 6 =$ 

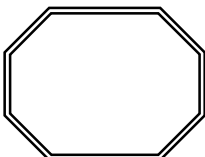
7. $80 + 8 =$  8. $90 + 7 =$ 

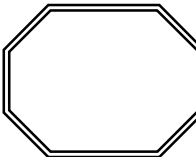
9. $80 + 9 =$  10. $70 + 2 =$ 

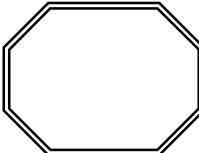



Adding

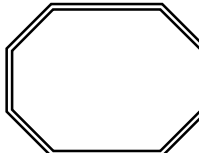
Have a go at these.
Adding to whole tens again.


1. $60 + 5 =$ 

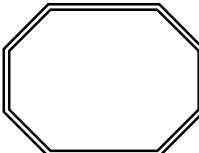
2. $30 + 2 =$ 

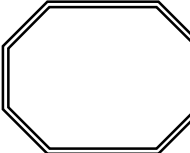
3. $70 + 9 =$ 

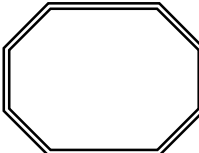
4. $20 + 1 =$ 

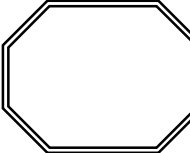
5. $80 + 2 =$ 

6. $90 + 8 =$ 

7. $40 + 4 =$ 

8. $80 + 3 =$ 

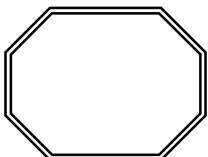
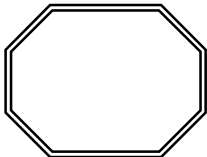
9. $90 + 7 =$ 



10. $60 + 6 =$ 

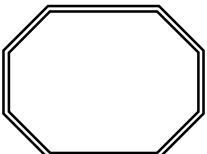



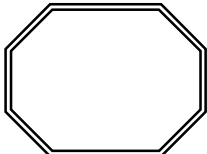
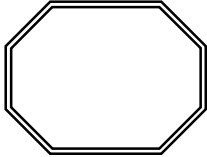
Adding

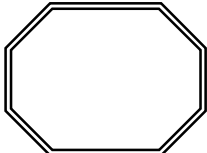
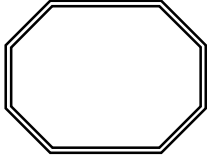
Wow! Now we are adding to whole hundreds!

1. $600 + 5 =$  2. $300 + 2 =$ 

3. $700 + 9 =$  4. $200 + 1 =$ 

5. $800 + 2 =$  6. $900 + 8 =$ 

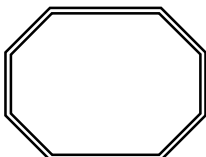
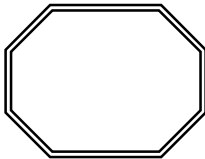
7. $400 + 4 =$  8. $800 + 3 =$ 

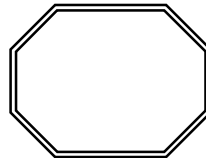

9. $900 + 7 =$  10. $600 + 6 =$ 

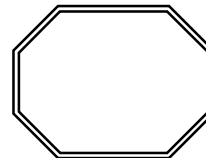
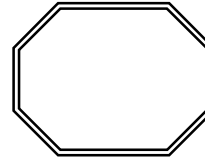



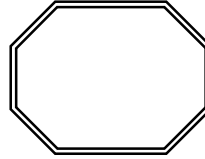
Adding


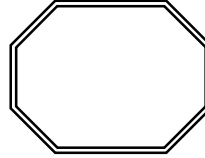
More whole hundreds –
really big numbers now!

1. $700 + 4 =$  2. $400 + 1 =$ 

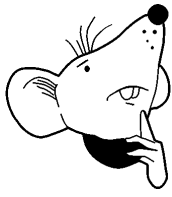
3. $800 + 8 =$  4. $300 + 9 =$ 

5. $900 + 2 =$  6. $400 + 7 =$ 

7. $300 + 3 =$  8. $900 + 2 =$ 

9. $200 + 6 =$  10. $700 + 5 =$ 



Missing numbers

Can you work
out the
missing
numbers?



Of
course!

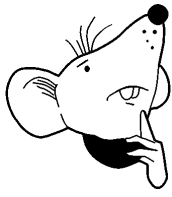
1. $70 + \bigcirc = 75$ 2. $60 + \bigcirc = 62$

3. $60 + \bigcirc = 68$ 4. $50 + \bigcirc = 56$

5. $10 + \bigcirc = 12$ 6. $10 + \bigcirc = 17$

7. $30 + \bigcirc = 33$ 8. $90 + \bigcirc = 95$

9. $100 + \bigcirc = 105$ 10. $80 + \bigcirc = 86$

Missing numbers

And I
suppose you
can do these
as well?



Easily!

1. $40 + \bigcirc = 42$

2. $60 + \bigcirc = 67$

3. $80 + \bigcirc = 83$

4. $20 + \bigcirc = 21$

5. $10 + \bigcirc = 19$

6. $90 + \bigcirc = 99$

7. $40 + \bigcirc = 45$

8. $60 + \bigcirc = 63$

9. $100 + \bigcirc = 104$

10. $50 + \bigcirc = 57$

Missing numbers

Now try
finding
these
missing
numbers.

Now, there is a pattern
to these.....



1. $600 + 3 = \square$

2. $600 + \square = 603$

3. $\square + 3 = 603$

4. $900 + 8 = \square$

5. $900 + \square = 908$

6. $\square + 8 = 908$

7. $300 + 4 = \square$

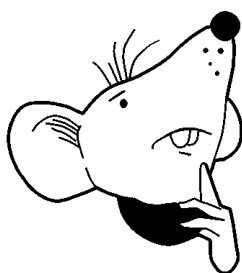
8. $300 + \square = 304$

9. $\square + 4 = 304$

10. $500 + 7 = \square$

11. $500 + \square = 507$

12. $\square + 7 = 507$



Can you see the
pattern?

Missing numbers

Can you fill
in the
missing
numbers?

Let me have a
look.....



1. $400 + 7 = \square$

2. $400 + \square = 407$

3. $\square + 7 = 407$

4. $500 + 6 = \square$

5. $500 + \square = 506$

6. $\square + 6 = 506$

7. $700 + 2 = \square$

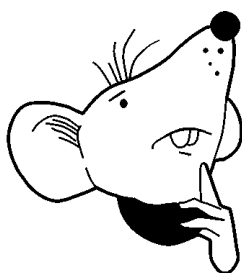
8. $700 + \square = 702$

9. $\square + 2 = 702$

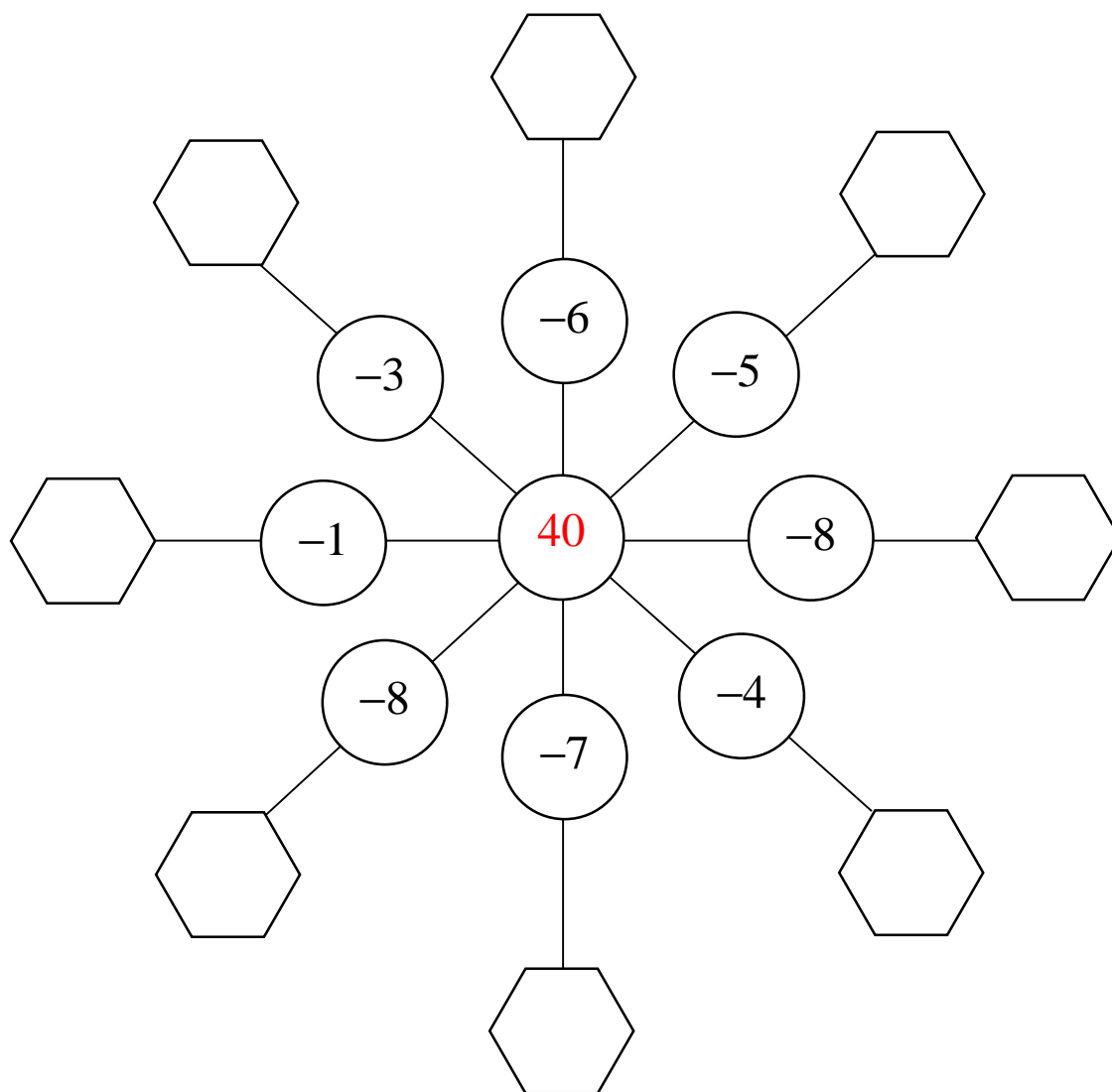
10. $800 + 5 = \square$

11. $800 + \square = 805$

12. $\square + 5 = 805$



Did you notice a
pattern in these?

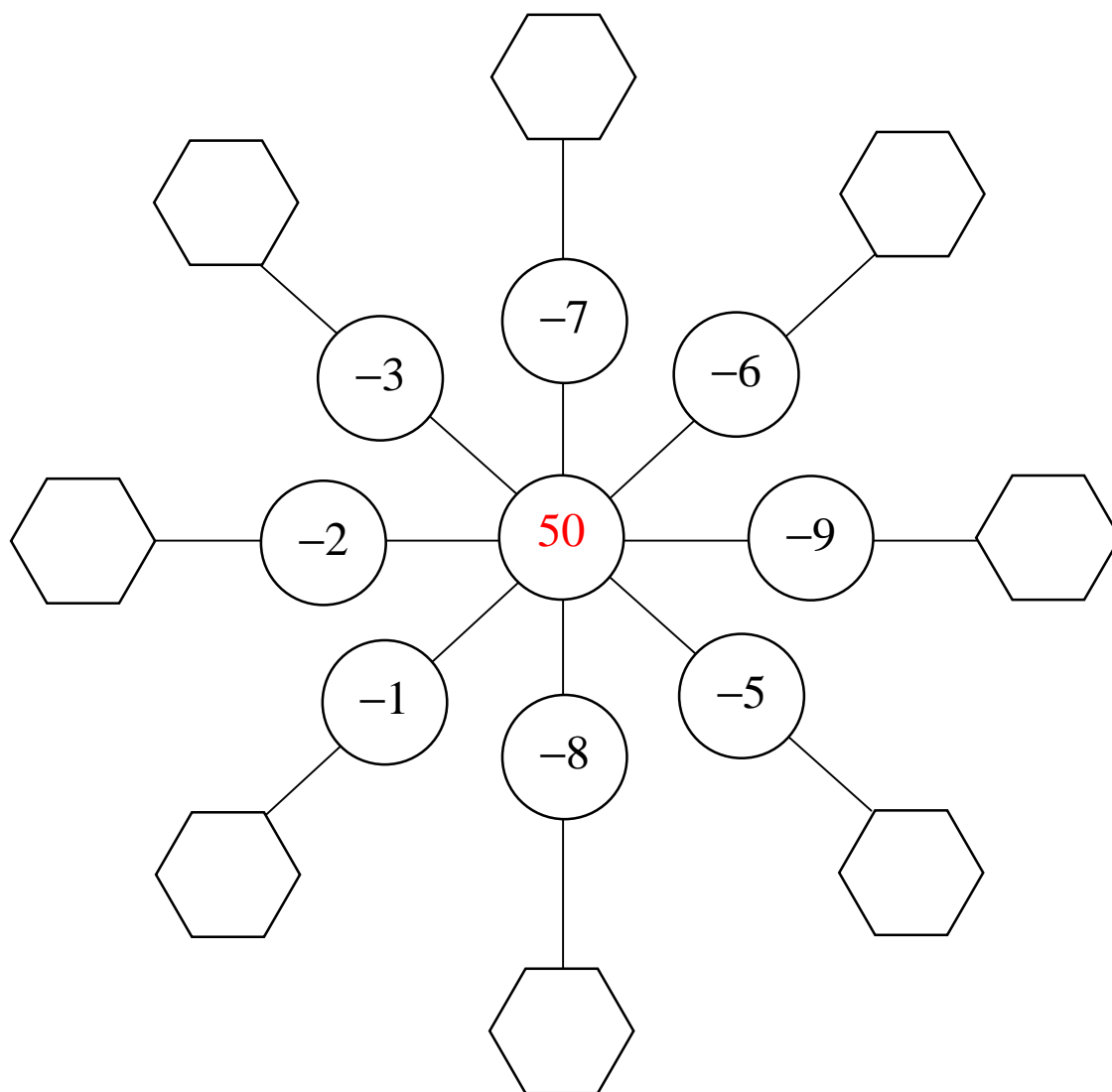


1. $60 - \square = 56$

2. $50 - \square = 42$

3. $30 - \square = 29$

4. $40 - \square = 35$

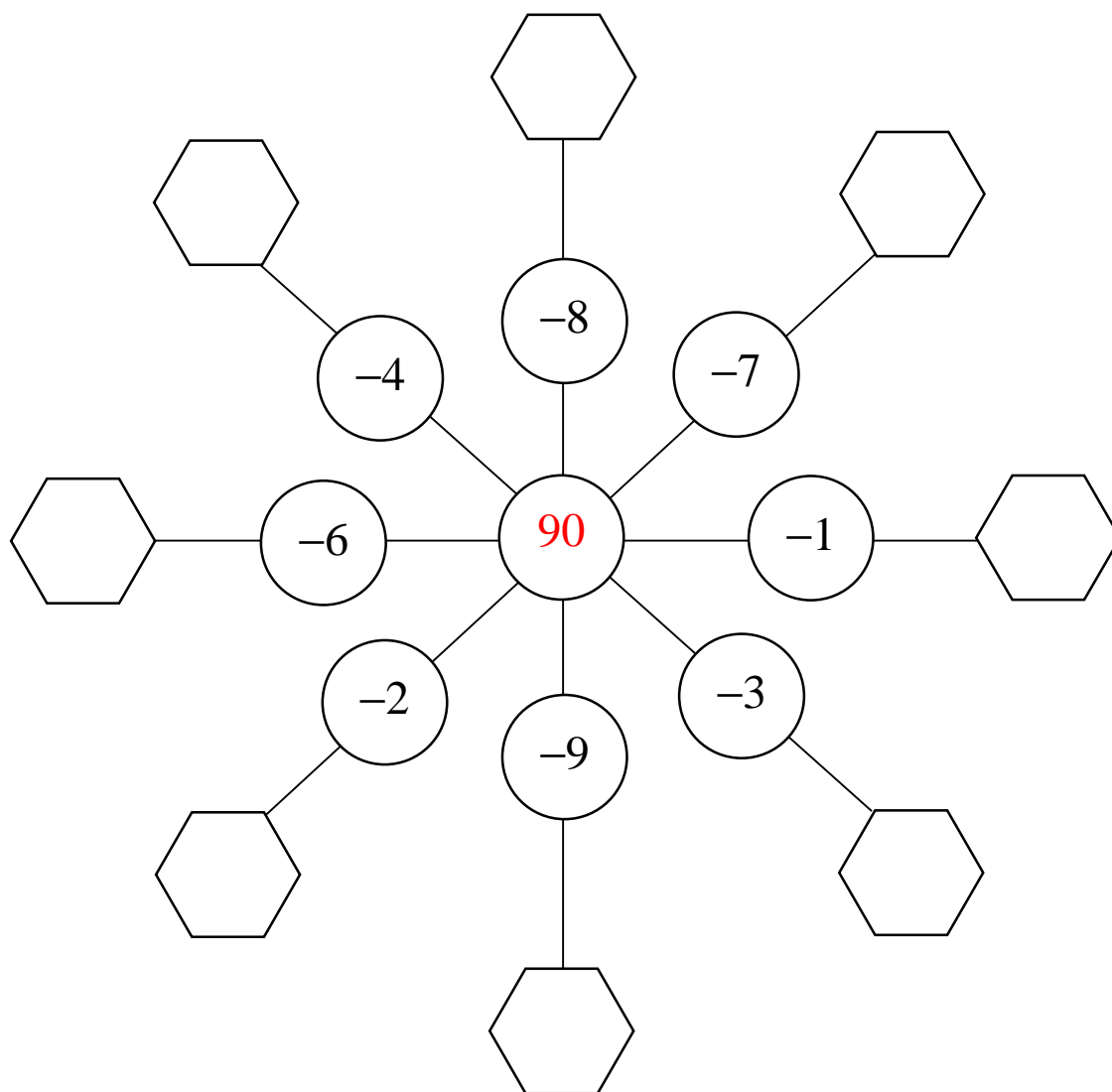


1. $70 - \square = 61$

2. $80 - \square = 74$

3. $20 - \square = 12$

4. $90 - \square = 88$



1. $30 - \square = 24$

2. $50 - \square = 44$

3. $40 - \square = 33$

4. $90 - \square = 82$

Adding to multiples of 10

I'm going to be 10 one day – in about three year's time!.



When adding a multiple of ten to a number the units will stay the same.

$$\text{eg } 34 + 50 = 84$$

Try these:

1. $26 + 20 =$

2. $32 + 30 =$

3. $41 + 40 =$

4. $35 + 50 =$

5. $56 + 20 =$

6. $29 + 30 =$

7. $35 + 40 =$

8. $44 + 50 =$

Adding multiples of 10

Try adding these
multiples of ten.



Try these:

1. $46 + 30 =$

2. $38 + 50 =$

3. $74 + 20 =$

4. $38 + 40 =$

5. $22 + 70 =$

6. $17 + 80 =$

7. $45 + 50 =$

8. $36 + 60 =$

9. $61 + 30 =$

10. $49 + 40 =$

Adding two digit numbers

Hi again! Try
adding these two,
two digit numbers.



Add:

1. $34 + 13 =$

2. $12 + 41 =$

3. $25 + 13 =$

4. $11 + 22 =$

5. $16 + 43 =$

6. $61 + 15 =$

7. $13 + 14 =$

8. $16 + 33 =$

9. $51 + 17 =$

10. $43 + 12 =$

Adding two digit numbers

These can be rather tricky.
Have a go.....

1. $23 + \square = 36$

2. $34 + \square = 48$

3. $\square + 22 = 35$

4. $\square + 35 = 47$

5. $25 + \square = 37$

6. $42 + \square = 55$

7. $\square + 33 = 44$

8. $\square + 31 = 46$

9. $75 + \square = 89$

10. $28 + \square = 39$

Subtracting teens from two digit numbers

Now it's time for a
little subtraction.
Teens only.



Subtract:

1. $26 - 13 =$

2. $35 - 12 =$

3. $44 - 11 =$

4. $28 - 15 =$

5. $48 - 15 =$

6. $67 - 16 =$

7. $39 - 13 =$

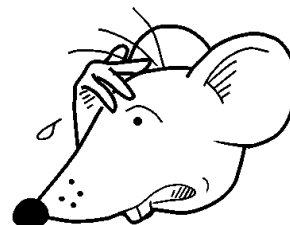
8. $74 - 12 =$

9. $88 - 16 =$

10. $76 - 15 =$

Subtracting teens from two digit numbers

How about some more
really hard subtractions!
Off you go....



Subtract:

1. $35 - 14 = \square$

2. $44 - 12 = \square$

3. $55 - 13 = \square$

4. $39 - 18 = \square$

5. $59 - 14 = \square$

6. $77 - 15 = \square$

7. $45 - 12 = \square$

8. $78 - 16 = \square$

9. $99 - 19 = \square$

10. $78 - 13 = \square$

Answers**Page 3**

1. 28 2. 37 3. 48 4. 67 5. 89

Page 4

1. 19 2. 29 3. 39 4. 46 5. 59 6. 68 7. 78 8. 87 9. 97 10. 97

Page 5

1. 59 2. 49 3. 78 4. 59 5. 29 6. 39 7. 67 8. 29 9. 38 10. 39

Page 6

1. 37 2. 29 3. 45 4. 79 5. 26 6. 58 7. 99 8. 85 9. 64 10. 27

Page 7

1. 45 2. 22 3. 64 4. 70 5. 52 6. 71 7. 82 8. 41 9. 21 10. 37

Page 8

1. 55 2. 32 3. 41 4. 81 5. 62 6. 81 7. 92 8. 53 9. 34 10. 41

Page 9

1. 25 2. 34 3. 44 4. 58 5. 61 6. 76 7. 88 8. 97 9. 89 10. 72

Page 10

1. 65 2. 32 3. 79 4. 21 5. 82 6. 98 7. 44 8. 83 9. 97 10. 66

Page 11

1. 605 2. 302 3. 709 4. 201 5. 802 6. 908 7. 404 8. 803 9. 907 10. 606

Page 12

1. 704 2. 401 3. 808 4. 309 5. 902 6. 407 7. 303 8. 902 9. 206 10. 705

Page 13

1. 5 2. 2 3. 8 4. 6 5. 2 6. 7 7. 3 8. 5 9. 5 10. 6

Page 14

1. 2 2. 7 3. 3 4. 1 5. 9 6. 9 7. 5 8. 3 9. 4 10. 7

Page 151. 603 2. 3 3. 600 4. 908 5. 8 6. 900
7. 304 8. 4 9. 300 10. 507 11. 7 12. 500**Page 16**1. 407 2. 7 3. 400 4. 506 5. 6 6. 500
7. 702 8. 2 9. 700 10. 805 11. 5 12. 800

Answers continued**Page 17**

Clockwise: 34 35 32 36 33 32 39 37

1. 4 2. 8 3. 1 4. 5

Page 18

Clockwise: 43 44 41 45 42 49 48 47

1. 9 2. 6 3. 8 4. 2

Page 19

Clockwise: 82 83 89 87 81 88 84 86

1. 6 2. 6 3. 7 4. 8

Page 20

1. 46 2. 62 3. 81 4. 85 5. 76 6. 59 7. 75 8. 94

Page 21

1. 76 2. 88 3. 94 4. 78 5. 92 6. 97 7. 95 8. 96 9. 91 10. 89

Page 22

1. 47 2. 53 3. 38 4. 33 5. 59 6. 76 7. 27 8. 49 9. 68 10. 55

Page 23

1. 13 2. 14 3. 13 4. 12 5. 12 6. 13 7. 11 8. 15 9. 14 10. 11

Page 24

1. 13 2. 23 3. 33 4. 13 5. 33 6. 51 7. 26 8. 62 9. 72 10. 61

Page 25

1. 21 2. 32 3. 42 4. 21 5. 45 6. 62 7. 33 8. 62 9. 80 10. 65