

Grade 1 Advanced Workbook

10 lessons · printable · answer key at the back

Name _____

Date _____

Contents

Chapter 1 · Addition and Subtraction Facts	
1-1 Adding within 10	1
1-2 Subtracting within 10	3
1-3 Making 10	4
1-4 Adding within 20	5
1-5 Subtracting within 20	6
1-6 Missing Numbers	7
Chapter 2 · Numbers to 100	
2-1 Tens and Ones	8
Chapter 3 · Shapes	
3-1 Naming Shapes	9
Chapter 4 · Problem Solving and Review	
4-1 Word Problems	10
4-2 Review: Adding and Subtracting	11

Adding within 10

WORKED EXAMPLE

$$5 + 1 = \underline{6}$$

1. Addition

Work out each sum.

1 $5 + 2 = \underline{\quad}$

2 $5 + 5 = \underline{\quad}$

3 $7 + 1 = \underline{\quad}$

4 $1 + 9 = \underline{\quad}$

5 $2 + 5 = \underline{\quad}$

6 $4 + 5 = \underline{\quad}$

7 $9 + 1 = \underline{\quad}$

8 $8 + 0 = \underline{\quad}$

9 $2 + 8 = \underline{\quad}$

10 $0 + 9 = \underline{\quad}$

11 $4 + 4 = \underline{\quad}$

12 $9 + 0 = \underline{\quad}$

13 $1 + 8 = \underline{\quad}$

14 $3 + 5 = \underline{\quad}$

15 $5 + 4 = \underline{\quad}$

16 $0 + 10 = \underline{\quad}$

17 $2 + 6 = \underline{\quad}$

18 $7 + 2 = \underline{\quad}$

19 $6 + 3 = \underline{\quad}$

20 $0 + 7 = \underline{\quad}$

21 $3 + 6 = \underline{\quad}$

22 $4 + 6 = \underline{\quad}$

23 $8 + 1 = \underline{\quad}$

24 $6 + 2 = \underline{\quad}$

2. Word problems: adding

Read each problem. Write the answer.

- 25 Maya and Max have some cookies. Maya has 5 and Max has 4.

How many cookies do the two of them have in total?

- 26 Leo has 11 apples. Ava has 9.

How many apples do they have in all?

2. Word problems: adding (continued)

Read each problem. Write the answer.

- 27 Nina had 11 pencils before being given 6 more at the library.
How many pencils does Nina have now?

- 28 Nina has 9 apples. Max has 3.
How many apples do they have in all?

Subtracting within 10

WORKED EXAMPLE

$$4 - 1 = \underline{3}$$

3. Subtraction

Work out each difference.

1 $8 - 7 = \underline{\quad}$

2 $9 - 5 = \underline{\quad}$

3 $8 - 6 = \underline{\quad}$

4 $10 - 5 = \underline{\quad}$

5 $7 - 5 = \underline{\quad}$

6 $10 - 10 = \underline{\quad}$

7 $10 - 6 = \underline{\quad}$

8 $8 - 5 = \underline{\quad}$

9 $10 - 7 = \underline{\quad}$

10 $10 - 2 = \underline{\quad}$

11 $8 - 8 = \underline{\quad}$

12 $10 - 4 = \underline{\quad}$

13 $10 - 0 = \underline{\quad}$

14 $8 - 3 = \underline{\quad}$

15 $9 - 6 = \underline{\quad}$

16 $9 - 1 = \underline{\quad}$

17 $7 - 3 = \underline{\quad}$

18 $10 - 3 = \underline{\quad}$

19 $9 - 2 = \underline{\quad}$

20 $7 - 4 = \underline{\quad}$

21 $9 - 3 = \underline{\quad}$

22 $10 - 8 = \underline{\quad}$

23 $9 - 4 = \underline{\quad}$

4. Word problems: subtracting

Read each problem. Write the answer.

- 24 Nina keeps 8 stickers. Max keeps only 4.

How many more stickers does Nina have than Max?

- 25 Max has 8 cookies and Maya has 2.

How many more cookies does Max have than Maya?

- 26 Zoe has 7 cookies, while Nina has only 3 cookies.

How many more cookies does Zoe have than Nina?

Making 10

5. Make ten

Write the number that makes each one.

1 $8 + \underline{\quad} = 10$ 2 $1 + \underline{\quad} = 10$ 3 $2 + \underline{\quad} = 10$ 4 $9 + \underline{\quad} = 10$

5 $7 + \underline{\quad} = 10$ 6 $3 + \underline{\quad} = 10$ 7 $4 + \underline{\quad} = 10$ 8 $6 + \underline{\quad} = 10$

9 $5 + \underline{\quad} = 10$

Adding within 20

WORKED EXAMPLE

$$6 + 2 = \underline{8}$$

6. Addition

Work out each sum.

1 $8 + 2 = \underline{\quad}$

2 $5 + 13 = \underline{\quad}$

3 $12 + 4 = \underline{\quad}$

4 $14 + 5 = \underline{\quad}$

5 $16 + 0 = \underline{\quad}$

6 $19 + 0 = \underline{\quad}$

7 $9 + 5 = \underline{\quad}$

8 $5 + 11 = \underline{\quad}$

9 $1 + 17 = \underline{\quad}$

10 $12 + 6 = \underline{\quad}$

11 $8 + 3 = \underline{\quad}$

12 $0 + 19 = \underline{\quad}$

13 $6 + 8 = \underline{\quad}$

14 $3 + 7 = \underline{\quad}$

15 $16 + 2 = \underline{\quad}$

16 $6 + 14 = \underline{\quad}$

17 $8 + 4 = \underline{\quad}$

18 $8 + 8 = \underline{\quad}$

19 $0 + 18 = \underline{\quad}$

20 $13 + 2 = \underline{\quad}$

21 $10 + 9 = \underline{\quad}$

22 $5 + 14 = \underline{\quad}$

23 $0 + 20 = \underline{\quad}$

24 $6 + 7 = \underline{\quad}$

7. Word problems: adding

Read each problem. Write the answer.

- 25 Ava has 8 cookies while Leo has 2 cookies.

Between the two of them, how many cookies are there?

- 26 Ava has 9 pencils while Leo has 5 pencils.

Between the two of them, how many pencils are there?

- 27 Between them, Maya has 5 cookies and Zoe has 2.

How many cookies do they have altogether?

Subtracting within 20

WORKED EXAMPLE

$$13 - 9 = \underline{4}$$

8. Subtraction

Work out each difference.

- | | | |
|----------------------------------|----------------------------------|----------------------------------|
| 1 $11 - 4 = \underline{\quad}$ | 2 $19 - 15 = \underline{\quad}$ | 3 $17 - 12 = \underline{\quad}$ |
| 4 $19 - 17 = \underline{\quad}$ | 5 $16 - 5 = \underline{\quad}$ | 6 $18 - 3 = \underline{\quad}$ |
| 7 $16 - 8 = \underline{\quad}$ | 8 $17 - 13 = \underline{\quad}$ | 9 $19 - 7 = \underline{\quad}$ |
| 10 $20 - 6 = \underline{\quad}$ | 11 $17 - 7 = \underline{\quad}$ | 12 $19 - 3 = \underline{\quad}$ |
| 13 $19 - 1 = \underline{\quad}$ | 14 $15 - 15 = \underline{\quad}$ | 15 $20 - 19 = \underline{\quad}$ |
| 16 $19 - 2 = \underline{\quad}$ | 17 $12 - 5 = \underline{\quad}$ | 18 $20 - 1 = \underline{\quad}$ |
| 19 $20 - 5 = \underline{\quad}$ | 20 $16 - 6 = \underline{\quad}$ | 21 $18 - 7 = \underline{\quad}$ |
| 22 $18 - 13 = \underline{\quad}$ | 23 $20 - 10 = \underline{\quad}$ | |

9. Word problems: subtracting

Read each problem. Write the answer.

- 24 Between Nina and Ava there are 13 apples, and 9 of them belong to Nina.

How many apples belong to Ava?

- 25 Maya had only 10 cookies yesterday, but now has 17 cookies.

How many cookies did Maya get?

- 26 Zoe has 8 pencils, while Leo has 3.

How many more pencils does Zoe have than Leo?

Missing Numbers

WORKED EXAMPLE

$$\underline{1} + 15 = 16$$

10. Missing numbers: adding

Write the missing number in each one.

1 $\underline{\quad} + 1 = 17$

2 $9 + \underline{\quad} = 20$

3 $10 + \underline{\quad} = 16$

4 $13 + \underline{\quad} = 20$

5 $\underline{\quad} + 3 = 11$

6 $8 + \underline{\quad} = 19$

7 $\underline{\quad} + 9 = 16$

8 $\underline{\quad} + 10 = 15$

9 $\underline{\quad} + 18 = 19$

10 $\underline{\quad} + 17 = 18$

11 $5 + \underline{\quad} = 10$

12 $\underline{\quad} + 20 = 20$

13 $9 + \underline{\quad} = 17$

14 $15 + \underline{\quad} = 15$

15 $3 + \underline{\quad} = 18$

16 $19 + \underline{\quad} = 19$

17 $6 + \underline{\quad} = 13$

18 $8 + \underline{\quad} = 15$

19 $\underline{\quad} + 14 = 18$

20 $4 + \underline{\quad} = 15$

21 $\underline{\quad} + 19 = 19$

22 $3 + \underline{\quad} = 20$

23 $\underline{\quad} + 14 = 19$

24 $3 + \underline{\quad} = 17$

11. Missing numbers: subtracting

Write the missing number in each one.

25 $\underline{\quad} - 2 = 8$

26 $19 - \underline{\quad} = 11$

27 $16 - \underline{\quad} = 2$

28 $20 - \underline{\quad} = 18$

29 $\underline{\quad} - 9 = 4$

30 $\underline{\quad} - 9 = 8$

31 $\underline{\quad} - 9 = 7$

32 $11 - \underline{\quad} = 9$

33 $\underline{\quad} - 5 = 14$

34 $\underline{\quad} - 0 = 20$

35 $17 - \underline{\quad} = 7$

36 $\underline{\quad} - 15 = 5$

37 $\underline{\quad} - 9 = 5$

38 $13 - \underline{\quad} = 9$

39 $\underline{\quad} - 5 = 15$

40 $20 - \underline{\quad} = 8$

41 $17 - \underline{\quad} = 17$

42 $19 - \underline{\quad} = 3$

43 $\underline{\quad} - 9 = 6$

44 $11 - \underline{\quad} = 3$

45 $\underline{\quad} - 9 = 10$

46 $\underline{\quad} - 16 = 4$

47 $\underline{\quad} - 2 = 16$

48 $\underline{\quad} - 3 = 8$

WORKED EXAMPLE

$$50 + 1 \rightarrow \underline{51}$$

12. Reading expanded form

Write the number each expanded form makes.

1 $50 \rightarrow \underline{\quad}$

2 $90 + 4 \rightarrow \underline{\quad}$

3 $50 + 8 \rightarrow \underline{\quad}$

4 $70 + 9 \rightarrow \underline{\quad}$

5 $30 + 9 \rightarrow \underline{\quad}$

6 $30 + 3 \rightarrow \underline{\quad}$

7 $30 + 1 \rightarrow \underline{\quad}$

8 $20 + 6 \rightarrow \underline{\quad}$

9 $40 + 8 \rightarrow \underline{\quad}$

10 $90 + 8 \rightarrow \underline{\quad}$

11 $40 + 4 \rightarrow \underline{\quad}$

12 $90 + 9 \rightarrow \underline{\quad}$

13 $40 + 1 \rightarrow \underline{\quad}$

14 $70 + 2 \rightarrow \underline{\quad}$

15 $80 \rightarrow \underline{\quad}$

16 $10 + 4 \rightarrow \underline{\quad}$

17 $70 + 6 \rightarrow \underline{\quad}$

18 $60 + 9 \rightarrow \underline{\quad}$

19 $60 + 4 \rightarrow \underline{\quad}$

20 $40 + 2 \rightarrow \underline{\quad}$

21 $80 + 4 \rightarrow \underline{\quad}$

22 $10 + 5 \rightarrow \underline{\quad}$

23 $90 + 2 \rightarrow \underline{\quad}$

24 $40 + 3 \rightarrow \underline{\quad}$

25 $80 + 6 \rightarrow \underline{\quad}$

26 $30 + 4 \rightarrow \underline{\quad}$

27 $30 + 5 \rightarrow \underline{\quad}$

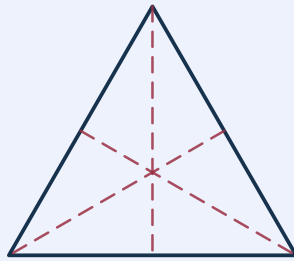
28 $40 \rightarrow \underline{\quad}$

29 $30 + 8 \rightarrow \underline{\quad}$

30 $30 \rightarrow \underline{\quad}$

Naming Shapes

WORKED EXAMPLE



pentagon

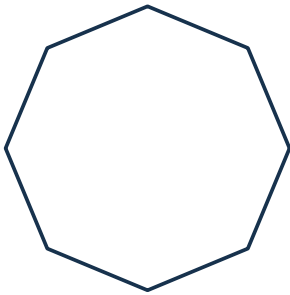
square

triangle

13. Name the shape

Circle the name of each shape.

1



hexagon

octagon

rectangle

2

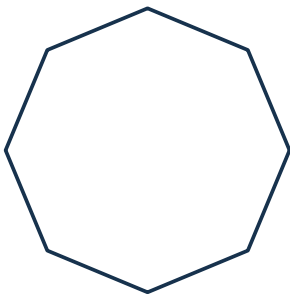


octagon

pentagon

rectangle

3

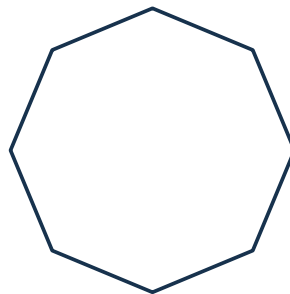


octagon

pentagon

rectangle

4

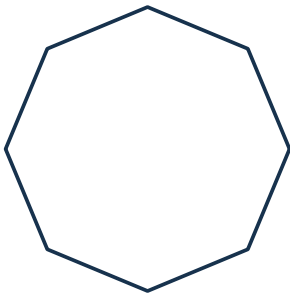


octagon

rectangle

triangle

5

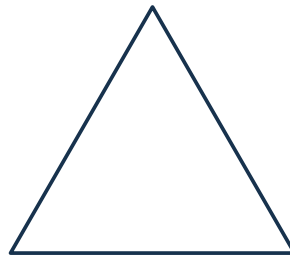


hexagon

octagon

triangle

6



octagon

square

triangle

Word Problems

WORKED EXAMPLE

Nina collected 7 cookies near the library, then 4 more.

How many cookies does Nina have now?

ANSWER: $7 + 4 = 11$ cookies

14. Word problems: adding

Read each problem. Write the answer.

- 1 Nina already had 12 pencils and collected 7 more.

How many pencils does Nina have in all?

- 2 Max has 10 pencils. Maya has 6.

How many pencils do they have in all?

15. Word problems: subtracting

Read each problem. Write the answer.

- 3 Between Nina and Max there are 16 stickers, and 12 of them belong to Nina.

How many stickers belong to Max?

- 4 Max counted 10 stickers at first, and ended up with 18 stickers.

How many stickers did Max buy?

Review: Adding and Subtracting

WORKED EXAMPLE

$$2 + 11 = \underline{13}$$

16. Addition

Work out each sum.

1 $4 + 7 = \underline{\quad}$

2 $9 + 11 = \underline{\quad}$

3 $5 + 7 = \underline{\quad}$

4 $15 + 3 = \underline{\quad}$

5 $12 + 3 = \underline{\quad}$

6 $8 + 12 = \underline{\quad}$

7 $4 + 14 = \underline{\quad}$

8 $3 + 7 = \underline{\quad}$

9 $12 + 7 = \underline{\quad}$

17. Subtraction

Work out each difference.

10 $17 - 10 = \underline{\quad}$

11 $16 - 8 = \underline{\quad}$

12 $16 - 12 = \underline{\quad}$

13 $19 - 8 = \underline{\quad}$

14 $12 - 9 = \underline{\quad}$

15 $19 - 17 = \underline{\quad}$

16 $19 - 19 = \underline{\quad}$

17 $13 - 5 = \underline{\quad}$

18 $18 - 17 = \underline{\quad}$

18. Word problems: mixed

Read each problem. Write the answer.

- 19 Max has 6 cookies, while Maya has only 5 cookies.

How many more cookies does Max have than Maya?

- 20 Nina began with 9 pencils. After collecting some more, Nina had 17 pencils.

How many pencils did Nina collect?

- 21 Of the 7 cookies Ava had, only 3 cookies remained.

How many cookies did Ava give away?

Answer Key (1 of 4)

Adding within 10

Addition

1. $5 + 2 = 7$
2. $5 + 5 = 10$
3. $7 + 1 = 8$
4. $1 + 9 = 10$
5. $2 + 5 = 7$
6. $4 + 5 = 9$
7. $9 + 1 = 10$
8. $8 + 0 = 8$
9. $2 + 8 = 10$
10. $0 + 9 = 9$
11. $4 + 4 = 8$
12. $9 + 0 = 9$
13. $1 + 8 = 9$
14. $3 + 5 = 8$
15. $5 + 4 = 9$
16. $0 + 10 = 10$
17. $2 + 6 = 8$
18. $7 + 2 = 9$
19. $6 + 3 = 9$
20. $0 + 7 = 7$
21. $3 + 6 = 9$
22. $4 + 6 = 10$
23. $8 + 1 = 9$
24. $6 + 2 = 8$

Word problems: adding

25. $5 + 4 = 9$ cookies
26. $11 + 9 = 20$ apples
27. $11 + 6 = 17$ pencils
28. $9 + 3 = 12$ apples

Subtracting within 10

Subtraction

1. $8 - 7 = 1$
2. $9 - 5 = 4$
3. $8 - 6 = 2$
4. $10 - 5 = 5$

Subtracting within 10 (continued)

Subtraction (continued)

5. $7 - 5 = 2$
6. $10 - 10 = 0$
7. $10 - 6 = 4$
8. $8 - 5 = 3$
9. $10 - 7 = 3$
10. $10 - 2 = 8$
11. $8 - 8 = 0$
12. $10 - 4 = 6$
13. $10 - 0 = 10$
14. $8 - 3 = 5$
15. $9 - 6 = 3$
16. $9 - 1 = 8$
17. $7 - 3 = 4$
18. $10 - 3 = 7$
19. $9 - 2 = 7$
20. $7 - 4 = 3$
21. $9 - 3 = 6$
22. $10 - 8 = 2$
23. $9 - 4 = 5$

Word problems: subtracting

24. $8 - 4 = 4$ stickers
25. $8 - 2 = 6$ cookies
26. $7 - 3 = 4$ cookies

Making 10

Make ten

1. $8 + 2 = 10$
2. $1 + 9 = 10$
3. $2 + 8 = 10$
4. $9 + 1 = 10$
5. $7 + 3 = 10$
6. $3 + 7 = 10$
7. $4 + 6 = 10$
8. $6 + 4 = 10$
9. $5 + 5 = 10$

Answer Key (2 of 4)

Adding within 20

Addition

1. $8 + 2 = 10$
2. $5 + 13 = 18$
3. $12 + 4 = 16$
4. $14 + 5 = 19$
5. $16 + 0 = 16$
6. $19 + 0 = 19$
7. $9 + 5 = 14$
8. $5 + 11 = 16$
9. $1 + 17 = 18$
10. $12 + 6 = 18$
11. $8 + 3 = 11$
12. $0 + 19 = 19$
13. $6 + 8 = 14$
14. $3 + 7 = 10$
15. $16 + 2 = 18$
16. $6 + 14 = 20$
17. $8 + 4 = 12$
18. $8 + 8 = 16$
19. $0 + 18 = 18$
20. $13 + 2 = 15$
21. $10 + 9 = 19$
22. $5 + 14 = 19$
23. $0 + 20 = 20$
24. $6 + 7 = 13$

Word problems: adding

25. $8 + 2 = 10$ cookies
26. $9 + 5 = 14$ pencils
27. $5 + 2 = 7$ cookies

Subtracting within 20

Subtraction

1. $11 - 4 = 7$
2. $19 - 15 = 4$
3. $17 - 12 = 5$
4. $19 - 17 = 2$
5. $16 - 5 = 11$

Subtracting within 20 (continued)

Subtraction (continued)

6. $18 - 3 = 15$
7. $16 - 8 = 8$
8. $17 - 13 = 4$
9. $19 - 7 = 12$
10. $20 - 6 = 14$
11. $17 - 7 = 10$
12. $19 - 3 = 16$
13. $19 - 1 = 18$
14. $15 - 15 = 0$
15. $20 - 19 = 1$
16. $19 - 2 = 17$
17. $12 - 5 = 7$
18. $20 - 1 = 19$
19. $20 - 5 = 15$
20. $16 - 6 = 10$
21. $18 - 7 = 11$
22. $18 - 13 = 5$
23. $20 - 10 = 10$

Word problems: subtracting

24. $13 - 9 = 4$ apples
25. $17 - 10 = 7$ cookies
26. $8 - 3 = 5$ pencils

Missing Numbers

Missing numbers: adding

1. $16 + 1 = 17$
2. $9 + 11 = 20$
3. $10 + 6 = 16$
4. $13 + 7 = 20$
5. $8 + 3 = 11$
6. $8 + 11 = 19$
7. $7 + 9 = 16$
8. $5 + 10 = 15$
9. $1 + 18 = 19$
10. $1 + 17 = 18$
11. $5 + 5 = 10$

Answer Key (3 of 4)

Missing Numbers (continued)

Missing numbers: adding (continued)

12. $0 + 20 = 20$

13. $9 + 8 = 17$

14. $15 + 0 = 15$

15. $3 + 15 = 18$

16. $19 + 0 = 19$

17. $6 + 7 = 13$

18. $8 + 7 = 15$

19. $4 + 14 = 18$

20. $4 + 11 = 15$

21. $0 + 19 = 19$

22. $3 + 17 = 20$

23. $5 + 14 = 19$

24. $3 + 14 = 17$

Missing numbers: subtracting

25. $10 - 2 = 8$

26. $19 - 8 = 11$

27. $16 - 14 = 2$

28. $20 - 2 = 18$

29. $13 - 9 = 4$

30. $17 - 9 = 8$

31. $16 - 9 = 7$

32. $11 - 2 = 9$

33. $19 - 5 = 14$

34. $20 - 0 = 20$

35. $17 - 10 = 7$

36. $20 - 15 = 5$

37. $14 - 9 = 5$

38. $13 - 4 = 9$

39. $20 - 5 = 15$

40. $20 - 12 = 8$

41. $17 - 0 = 17$

42. $19 - 16 = 3$

43. $15 - 9 = 6$

44. $11 - 8 = 3$

45. $19 - 9 = 10$

46. $20 - 16 = 4$

Missing Numbers (continued)

Missing numbers: subtracting (continued)

47. $18 - 2 = 16$

48. $11 - 3 = 8$

Tens and Ones

Reading expanded form

1. $50 = 50$

2. $90 + 4 = 94$

3. $50 + 8 = 58$

4. $70 + 9 = 79$

5. $30 + 9 = 39$

6. $30 + 3 = 33$

7. $30 + 1 = 31$

8. $20 + 6 = 26$

9. $40 + 8 = 48$

10. $90 + 8 = 98$

11. $40 + 4 = 44$

12. $90 + 9 = 99$

13. $40 + 1 = 41$

14. $70 + 2 = 72$

15. $80 = 80$

16. $10 + 4 = 14$

17. $70 + 6 = 76$

18. $60 + 9 = 69$

19. $60 + 4 = 64$

20. $40 + 2 = 42$

21. $80 + 4 = 84$

22. $10 + 5 = 15$

23. $90 + 2 = 92$

24. $40 + 3 = 43$

25. $80 + 6 = 86$

26. $30 + 4 = 34$

27. $30 + 5 = 35$

28. $40 = 40$

29. $30 + 8 = 38$

30. $30 = 30$

Answer Key (4 of 4)

Naming Shapes

Name the shape

1. octagon — from hexagon, octagon, rectangle
2. rectangle — from octagon, pentagon, rectangle
3. octagon — from octagon, pentagon, rectangle
4. octagon — from octagon, rectangle, triangle
5. octagon — from hexagon, octagon, triangle
6. triangle — from octagon, square, triangle

Review: Adding and Subtracting (continued)

Subtraction (continued)

15. $19 - 17 = 2$
16. $19 - 19 = 0$
17. $13 - 5 = 8$
18. $18 - 17 = 1$

Word problems: mixed

19. $6 - 5 = 1$ cookie
20. $17 - 9 = 8$ pencils
21. $7 - 3 = 4$ cookies

Word Problems

Word problems: adding

1. $12 + 7 = 19$ pencils
2. $10 + 6 = 16$ pencils

Word problems: subtracting

3. $16 - 12 = 4$ stickers
4. $18 - 10 = 8$ stickers

Review: Adding and Subtracting

Addition

1. $4 + 7 = 11$
2. $9 + 11 = 20$
3. $5 + 7 = 12$
4. $15 + 3 = 18$
5. $12 + 3 = 15$
6. $8 + 12 = 20$
7. $4 + 14 = 18$
8. $3 + 7 = 10$
9. $12 + 7 = 19$

Subtraction

10. $17 - 10 = 7$
11. $16 - 8 = 8$
12. $16 - 12 = 4$
13. $19 - 8 = 11$
14. $12 - 9 = 3$

Solutions (1 of 6)

Adding within 10

Word problems: adding

25. Maya and Max have some cookies. Maya has 5 and Max has 4.

How many cookies do the two of them have in total? ____

asked:

How many cookies do the two of them have in total?

$$5 + 4 = 9$$

9 cookies

Read it through once and do NOTHING. Grabbing the numbers on the first read means choosing an operation before you know the story, and that choice is the only hard part of a word problem.

Now the numbers: 5 and 4. Finding them is not the same as knowing what to do with them — that comes next, and it comes from the story rather than from the numbers.

You are told both parts and asked for the whole — so they join together. So this one is an addition: $5 + 4$.

$5 + 4 = 9$ cookies. And answer the question that was ASKED — "How many cookies do the two of them have in total?" — in cookies, because the sum on its own is not yet an answer.

Solutions (2 of 6)

Adding within 10 (continued)

Word problems: adding (continued)

26. Leo has 11 apples. Ava has 9.

How many apples do they have in all? ____

asked:

How many apples do they have in all?

$$11 + 9 = 20$$

20 apples

Read it through once and do NOTHING. Grabbing the numbers on the first read means choosing an operation before you know the story, and that choice is the only hard part of a word problem.

Now the numbers: 11 and 9. Finding them is not the same as knowing what to do with them — that comes next, and it comes from the story rather than from the numbers.

You are told both parts and asked for the whole — so they join together. So this one is an addition: $11 + 9$.

$11 + 9 = 20$ apples. And answer the question that was ASKED — "How many apples do they have in all?" — in apples, because the sum on its own is not yet an answer.

Solutions (3 of 6)

Making 10

Make ten

1. $8 + \underline{\quad} = 10$



$$8 + 2 = 10$$

8 and 2 2 and 8

Picture ten spaces in a row with 8 of them filled. The question is how many are still empty — not a sum to work out so much as a gap to see.

Count the empty ones: 2. So 8 and 2 make 10.

This pair is worth knowing by heart rather than counting each time — there are only five of them for ten, and 2 and 8 is the same pair the other way round. They are what makes $8 + 5$ easy later: take 2 from the 5 to finish the ten.

2. $1 + \underline{\quad} = 10$



$$1 + 9 = 10$$

1 and 9 9 and 1

Picture ten spaces in a row with 1 of them filled. The question is how many are still empty — not a sum to work out so much as a gap to see.

Count the empty ones: 9. So 1 and 9 make 10.

This pair is worth knowing by heart rather than counting each time — there are only five of them for ten, and 9 and 1 is the same pair the other way round. They are what makes $8 + 5$ easy later: take 2 from the 5 to finish the ten.

Solutions (4 of 6)

Tens and Ones

Reading expanded form

1. $50 \rightarrow \underline{\quad}$

$$50 = 50$$

This is expanded form run backwards: each piece already says which column it belongs in, so nothing needs working out — only placing.

Put each one in its own column and the number falls out: 50.

2. $90 + 4 \rightarrow \underline{\quad}$

$$90 + 4 = 94$$

This is expanded form run backwards: each piece already says which column it belongs in, so nothing needs working out — only placing.

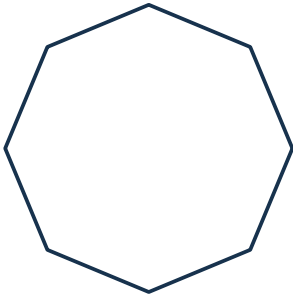
Put each one in its own column and the number falls out: 94.

Solutions (5 of 6)

Naming Shapes

Name the shape

1.



hexagon

octagon

rectangle

sides: 8

octagon

Count the sides first — that is what almost every shape name is built from, and it is one number rather than a picture to recognize.

8 sides makes it an octagon.

So it is an octagon.

Solutions (6 of 6)

Naming Shapes (continued)

Name the shape (continued)

2.



octagon

pentagon

rectangle

rectangle is also
a parallelogram (both
pairs of sides parallel)

Count the sides first — that is what almost every shape name is built from, and it is one number rather than a picture to recognize.

4 sides makes it a quadrilateral — and that is where naming gets more careful, because the four-sided shapes have families inside families.

This one is a rectangle — and it is ALSO a parallelogram (both pairs of sides parallel). Being one does not stop it being the others; the question wants the most exact name that fits.