



Accurate Mathemathics



A Course Book in Mathematics with Activity







Accurate Mathemathics

Typesetting & Graphics by



Dreamshapers # 9897035745

Editors

S Kumar Deepika Aggarwal

© All rights reserved.

No part of this book, including interior design, cover design and icons, may be reproduced or transmitted in any form, by any means (electronic, photocopying, recording or otherwise) without prior written permission from PETERSON PRESS.

Published by



Redg. Office

Behind Silver Line School, Laxmipuram,

Rajpur Chungi, AGRA-282001

Mobile: +91-9837004559, 983719441

Telefax: 0562-2481926

e-mail: namanpublishing@yahoo.com









CONTENTS



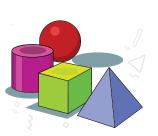
Numbers up to 50

| 1 tambers up to 30 | |
|---|----|
| Counting | 05 |
| Number Names and Number Patterns (1 to 50) | 07 |
| Before, After, Between | 12 |
| Comparing Numbers | 13 |
| Largest and Smallest | 14 |
| Revision-1 | 15 |
| Addition | 16 |
| Do and Digest : Number Line | 18 |
| Addition Exercises | 19 |
| Subtraction | 22 |
| Zero and Related Exercises | 27 |
| Do and Digest : Relation between Addition and Subtraction | 30 |
| Math Gym | 31 |
| Revision-2 | 32 |
| Addition and Subtraction Story Sums | 33 |
| Understanding Numbers up to 50 | 35 |
| Expand and Add | 36 |
| Exercises on Addition and Subtraction | 37 |
| Ordinal Numbers | 39 |
| Numbers up to 100 | |
| 51 to 100 | 41 |
| Before, After, Between | 44 |
| Patterns | 46 |
| Revision-3 | 49 |
| Understanding 51 to 100 | 50 |
| Short and Long forms | 52 |
| Tens and Ones on the Abacus | 53 |
| Comparing Numbers | 55 |
| Largest and Smallest | 57 |
| Order | 58 |
| Math Gym | 60 |
| Revision-4 | 61 |









| Addition Using Tens and Ones | 62 | _ |
|---------------------------------|--------------|-----------|
| Addition Story Sums | 66 | |
| Subtraction Using Tens and Ones | 67 | |
| Subtraction Story Sums | 70 | |
| More Story Sums | 70 71 | |
| Revision-5 | 71 72 | |
| Money | / _ | |
| Money | 73 | |
| Money Sums | 76 | |
| Do and Digest: Shapes | 77 | |
| Add Three Numbers | 81 | |
| Revision-6 | 85 | |
| Adding Equal Groups | 86 | |
| Multiplication | 00 | 700 |
| Multiplication | 87 | HITTO I |
| Do and Digest | 90 | |
| Multiplication Tables | 91 | |
| Math Gym | 93 | |
| Exercises on Multiplication | 94 | |
| Revision-7 | 98 | 4 |
| Numbers 101 to 200 | | n. A |
| 101 to 200 | 99 | ×" /// |
| Understanding 100 to 200 | 101 | +'\// |
| Do and Digest | 106 | |
| Addition with Carrying | 107 | |
| Do and Digest | 110 | \forall |
| Subtraction with Borrowing | 111 | |
| Measurement of Time and Length | | |
| Time | 114 | |
| Calendar | 116 | |
| How Long? | 118 | |
| Do and Digest | 119 | |
| Revision-8 | 120 | |

Counting

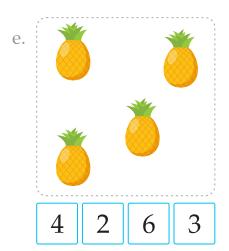
1. Tick (\checkmark) the correct number.

a. 8 10

C.

b. 8

d. 5 6 3 5



2. Draw dots to match the numbers, as shown.

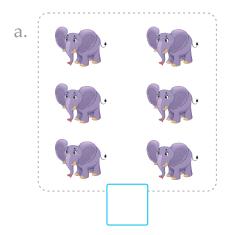








1. Count and write.

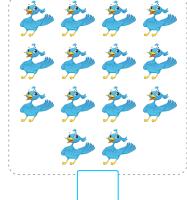


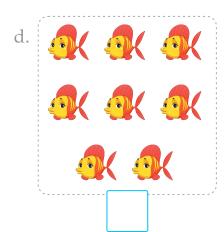


b. AAA AAA





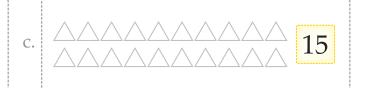






2. Colour to match the numbers, as shown.









1 to 50

1. Read the numbers and number names.

- 1 one
- 2
- two
- 3 three
- 1
- 4 four
- 5
- five
- 6 six
- 7 seven
- 8
- eight
- 9 nine
- 10 ten

- 11 eleven
- 12
- twelve
- 13 thirteen
- 14
- 14 fourteen
- 15
- fifteen
- 16 sixteen
- sixteen
- 17 seventeen
- 18 eighteen
- 19
- nineteen 20

twenty

- 21
- twenty-one
 - 22
- twenty-two
 - 23
- twenty-three
 - 24
- twenty-four
 - 25
- twenty-five
 - 26
- twenty-six
 - 27
- twenty-seven
 - 28
- twenty-eight
 - 29
- twenty-nine
 - 30 thirty

- 31
- thirty-one
 - 32
- thirty-two
- 33
- thirty-three
 - 34
- thirty-four
 - 35
- thirty-five
- 36
- thirty-six
- 37
- thirty-seven
 - 38
- thirty-eight
 - 39
- thirty-nine
 - 40 forty

- 41
- forty-one
- 42
- forty-two
 - 43
- forty-three
 - 44
- forty-four
 - 45
- forty-five
 - 46
- forty-six
- 47
- forty-seven
 - 48
- forty-eight
 - 49
- forty-nine
 - 50 fifty

2. Write 1 to 50.

- 1

- 9

- 11

- - 16

- - O









25



37

37

48





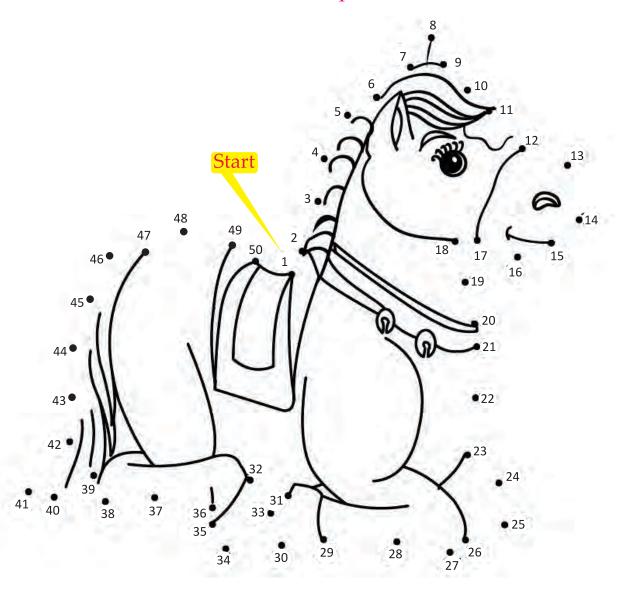
1. Write the missing numbers.



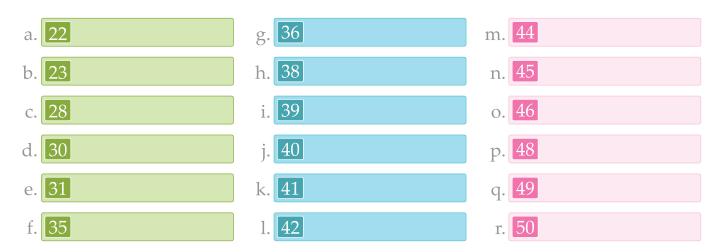
2. Write the number names

| Wille the Hulliber Hallie | .5. | |
|---------------------------|-------|-------|
| a. 1 | h. 8 | o. 15 |
| b. 2 | i. 9 | p. 16 |
| c. 3 | j. 10 | q. 17 |
| d. 4 | k. 11 | r. 18 |
| e. 5 | 1. 12 | s. 19 |
| f. 6 | m. 13 | t. 20 |
| g. 7 | n. 14 | |

1. Join the dots in order. Then colour the picture.



2. Write the number names.



Counting Down

1. Count backwards and fill in.



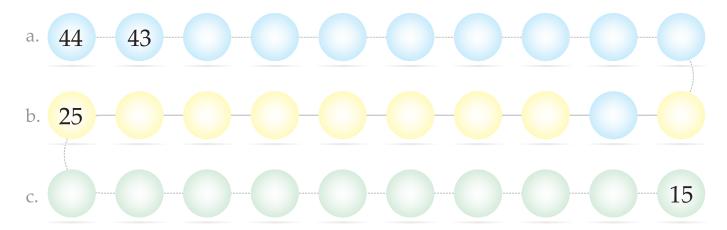






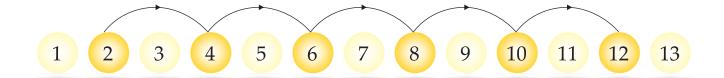


2. Fill in the missing numbers.



Number Patterns: Alternate Numbers





1. Fill in.







2. Fill in.

- 3 5 7 a.
- 24 26 b.
- 8 C.

Before, After, Between

11 comes before 12. $\boxed{11} \Rightarrow \boxed{12} \Rightarrow \boxed{13}$ 13 comes after 12.

12 is between 11 and 13.

1. Write what comes before and after.

a. 5 6 7 b. 16 c. 39 d. 26 e. 20 f. 41 g. 35 h. 28

2. Write the number between.

a. 7 8 9 b. 12 14 c. 16 18 d. 21 23 e. 19 21 f. 27 29 g. 32 34 h. 42 44

3. Fill in.

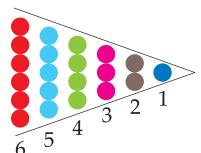
- a. The number before 10 is ___9__. e. 4
- b. The number after 20 is _____.
- ^{c.} The number before 32 is _____.
- d. The number after _____ is 43.

- e. 40 is between ____ and 41.
- f. 21 is between 20 and ____.
- g. _____ is between 10 and 12.
- h. _____ is between 38 and 40.

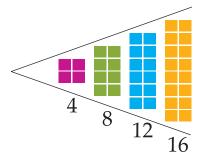
Comparing Numbers



8 green blocks are equal to 8 **yellow** blocks. We write, 8 green blocks = 8 yellow blocks.







6 beads are more than 4 beads. 6 is greater than 4, or 6 > 4. 12 blocks are less than 16 blocks. 12 is less than 16, or 12 < 16.



For a number, smaller numbers come before it, greater numbers come after it.

1 2 3 4 5 6 7

8 9 10 11 12 13 14 15

These are less than 8.

These are greater than 8.

So,

5 > 4 | 4 > 3 | 3 < 4 | 5 < 6 | 9 = 9 | 12 > 10 | 14 > 12 | 12 < 21 | 16 < 38

1. Write >, < or =.

a. 8























e. (20



f. (31



13

g. 22



28

h. (35



29

i. (25



j. (2



14

8



38

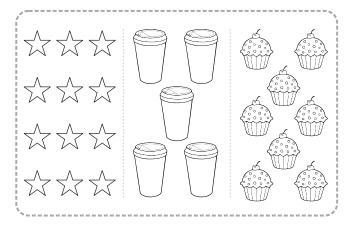


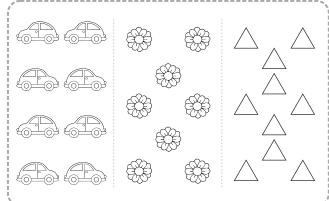


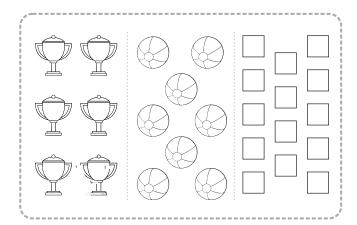
24

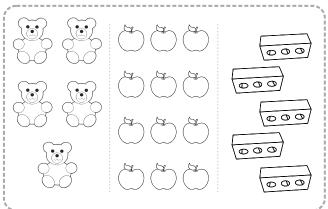
Largest and Smallest

1. Colour the largest (biggest group).









2. Write the largest number.

- a. 3 5 9 8 **9**
- b. 27 13 18 21
- c. 5 25 8 34

- d. 20 12 21 19
- e. 13 22 19 12
- f. 22 33 11 44

3. Tick (\checkmark) the smallest number.

- a. 5 2 9 6
- b. 16 12 19 15
- c. 50 37 28 8

- d. 33 43 34 23
- e. 28 29 25 26
- f. 7 5 12 11

Revision-1

1. Write the missing numbers.

11 12 23 14 19

2. Count backwards and fill in.

37 38

3. Fill in.

22 20 24

4. Write what comes before and after.

14 c. 27

5. Write the number between.

31 c. 20 22 d. 43 (8) b. (29)

6. Write >, < or = .

(33) b. (26) (18) c. (35) 35) d. 24)

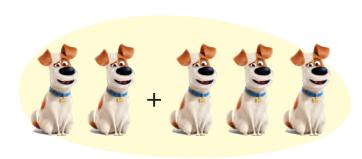
7. Write the number names.

c. 18 b. 23

d. 34 e. 47 f. 38

Addition

How many in all?



2 dogs and 3 dogs make 5 dogs in all. We write

$$2 + 3 = 5$$
 or $+\frac{3}{5}$

'+' shows addition.
Addition is putting things together.

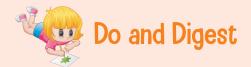


How many in all? Count and add.

Count and add.



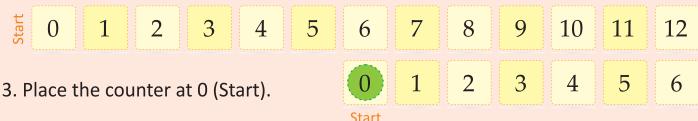




Aim To learn addition on a number strip/number line
Things needed Strip of paper, counter or coin

Do and Learn

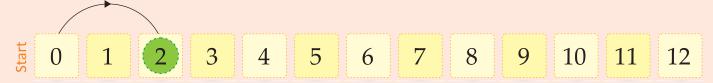
- 1. Divide a strip of paper into boxes. You can do this by folding the strip.
- 2. Number the boxes as shown. You now have a number strip.



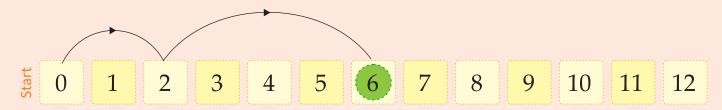
Zero (0), as you know, counts nothing.

4. Count 2 boxes after 0.

Shift the counter as you count. You will reach 2.



5. Count 4 more boxes after 2. Shift the counter as you count. You will reach 6. You have counted 2+ 4 = 6 Boxes.



Similarly add 1 and 2 on the number strip. Then add 3 and 4.

6. We can also show numbers on a number line. One is shown below.

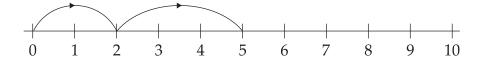


7. Use the counter to add 3 and 2 on the number line.

Also add: 4 and 2 6 and 4 5 and 3.

Add on the number line.

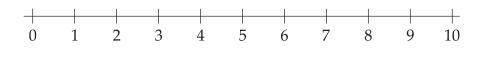
1.
$$2 + 3 = 5$$



$$2 + 3 =$$



$$4 + 4 =$$

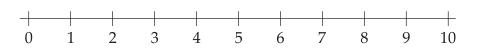


$$4. \quad 6 + 1 =$$





$$6. \quad 6 + 4 =$$

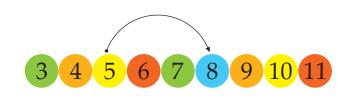




Add by counting forward.

$$5 + 3 = 8$$
 $\frac{5}{8}$





Use your fingers to count forward.

You can also use a number strip.

Add by counting forward.



d.
$$4 + 1 =$$

f.
$$6 + 1 =$$

g.
$$7 + 1 =$$

d.
$$4 + 2 =$$

f.
$$6 + 2 =$$

h.
$$8 + 2 =$$

d.
$$6 + 3 =$$

e.
$$7 + 3 =$$

f.
$$8 + 3 =$$

h.
$$10 + 3 =$$

3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Add.

d.
$$7 + 4 =$$

e.
$$8 + 4 =$$

e.
$$8 + 4 =$$
 f. $9 + 4 =$ g. $10 + 4 =$ h. $11 + 4 =$

2. a.
$$5 + 5 =$$
 b. $6 + 5 =$ c. $7 + 5 =$ d. $8 + 5 =$

c.
$$7 + 5 =$$

d.
$$8 + 5 =$$

e.
$$9 + 5 =$$

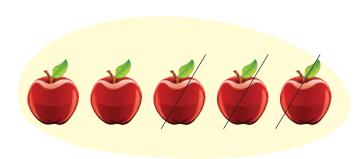
e.
$$9 + 5 =$$
 f. $10 + 5 =$ g. $11 + 5 =$ h. $12 + 5 =$

h.
$$12 + 5 =$$

3. Add.

Subtraction

From 5 apples take away 3. How many left?



Cross out 3. Count the apples left.

$$5 - 3 = 2$$

or

'—' shows subtraction. Subtraction is taking away.



How many left? Cross out, count and write.

1.

















From 5 take away 1.

2.





















From 6 take away 2.





















From 9 take away 5.















From 12 take away 6.

Count and Subtract.

















































































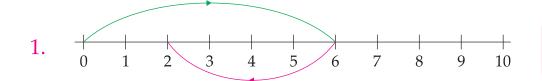








Subtract on the number line.



$$6 - 4 = 2$$

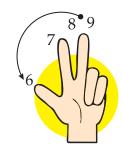
$$10 - 5 =$$

$$8 - 2 =$$

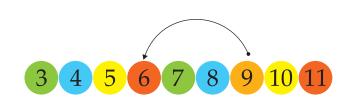


Subtract by counting back.

$$9 - 3 = 6 \qquad \frac{9}{-3}$$



Use your fingers to count back.



You can also use a number strip.

Subtract by counting back.



c.
$$4-1=$$
 d. $5-1=$

d.
$$5 - 1 =$$

e.
$$6 - 1 =$$

g.
$$8 - 1 =$$
 h. $9 - 1 =$

h.
$$9 - 1 =$$

b.
$$4-2=$$
 c. $5-2=$

c.
$$5-2=$$

e.
$$7 - 2 =$$

f.
$$8 - 2 =$$

3. a.
$$4 - 3 =$$

b.
$$5 - 3 =$$
 c. $6 - 3 =$

$$6 - 3 =$$

d.
$$7 - 3 =$$

f.
$$9 - 3 = g \cdot 10 - 3 = g$$

3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Subtract.

1. a.
$$5-4=$$
 b. $6-4=$ c. $7-4=$ d. $8-4=$

c.
$$7-4=$$

d.
$$8-4=$$

e.
$$9-4=$$
 f. $10-4=$ g. $14-4=$ h. $16-4=$

f.
$$10-4=$$

g.
$$14 - 4 =$$

h.
$$16 - 4 =$$

2. a.
$$6-5=$$
 b. $7-5=$ c. $8-5=$ d. $9-5=$

c.
$$8-5=$$

d.
$$9-5=$$

$$e.10 - 5 =$$

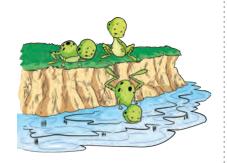
e.
$$10 - 5 =$$
 f. $12 - 5 =$ g. $13 - 5 =$ h. $15 - 5 =$

$$g \cdot 13 - 5 =$$

h.
$$15 - 5 =$$

3. Subtract.

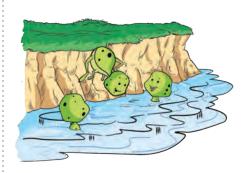
Zero



3 frogs sat on a rock. 1 jumps into a pool. 2 frogs left on the rock.



2 frogs sat on the rock. 1 jumps into the pool. 1 frog left on the rock.



1 frog sat on the rock. It jumps into the pool. 0 frog left on the rock.

Zero (0) stands for none. 0 counts nothing.

Adding Zero



3 rasgullas



0 rasgulla



$$3 + 0 = 3$$

0 rasgulla

$$0 + 5 = 5$$

number - 0 = same number



Fill in.

1. a.
$$1 + 0 = 1$$

b. $0 + 2 = 1$

c.
$$5 + 0 =$$

3. a.
$$6 + 0 = 4$$
. a. $9 + 0 = 6$

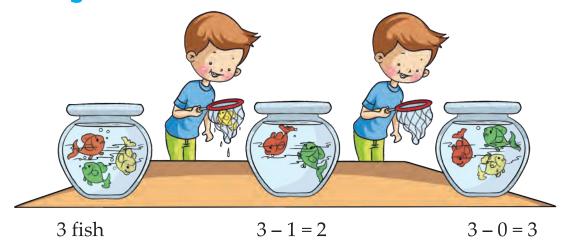
b.
$$0+2=$$
 b. $0+4=$ b. $7+0=$ b. $10+0=$ c. $3+0=$ c. $5+0=$ c. $16+0=$

c.
$$0 + 8 =$$

a.
$$9+0=$$

c.
$$16 + 0 =$$

Subtracting Zero



number - 0 = same number



Fill in.

a.
$$1 - 0 = 1$$

b.
$$4 - 0 =$$

a.
$$1-0=$$
 1 b. $4-0=$ c. $6-0=$ d. $9-0=$

d.
$$9 - 0 =$$

e.
$$2-0=$$
 f. $5-0=$ g. $7-0=$ h. $10-0=$

f.
$$5 - 0 =$$

g.
$$7 - 0 =$$

h.
$$10 - 0 =$$

i.
$$3 - 0 =$$

j.
$$0 - 0 =$$

i.
$$3-0=$$
 j. $0-0=$ k. $8-0=$ l. $12-0=$

Math & Gym

Fill in '+' or '-'.

1. a. 8
$$4 = 4$$
 b. 6 $4 = 10$ c. 9 $4 = 13$ d. 12 $7 = 5$

$$8 = 2$$

$$8 = 10$$

$$4 = 9$$

3. a. 16
$$2 = 18$$
 b. 12 $2 = 14$ c. 14 $9 = 5$ d. 17 $3 = 20$

$$9 = 5$$

$$2 = 20$$



Subtracting a Number from Itself



2 helicopters



Both take off. Helicopters left: 2 – 2



No, (0) helicopters left 2 - 2 = 0

number – same number = 0



Fill in.

a.
$$1 - 1 = 0$$

a.
$$1-1=0$$
 b. $4-4=$ c. $7-7=$ d. $10-10=$

c.
$$7 - 7 =$$

e.
$$2-2=$$
 f. $5-5=$ g. $8-8=$ h. $12-12=$

f.
$$5 - 5 =$$

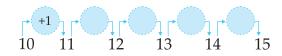
g.
$$8 - 8 =$$

i.
$$3 - 3 =$$

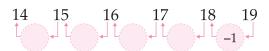
i.
$$3 - 3 =$$
 j. $6 - 6 =$ k. $9 - 9 =$ l. $15 - 15 =$

Math Gym

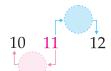
1. Fill in for counting forward.



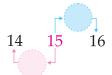
2. Fill in for counting backward.



3. Fill in for the number before and after.









Aim To learn the relationship between addition and subtraction Things needed Coloured cards, tape

Do and Learn

- 1. Tape the cards to make two strips of different colours.
- 2. Place the strips in a line and add.





3. Turn the strips around and add.





4. Take away 3 blue cards from the whole.





5. Take away 4 green cards from the whole.





3 + 4 = 7

$$4 + 3 = 7$$

$$7 - 3 = 4$$

$$7 - 4 = 3$$

6. Note how the three numbers are related by addition and subtraction.

Fill in.





$$2 + 5 = 7$$

$$7 - 2 = _{__}$$

$$7 - 5 =$$

$$5 + = 7$$

$$-$$
 + 2 = 7

$$7 - 3 =$$

$$7 - 4 =$$

$$3 + = 7$$

$$---$$
 + 5 = 11



1. Fill in as shown.

a.

| - | 3 | 6 |
|---|---|---|
| | | |

d.

5

11

| 4 | |
|---|--|
| 3 | |

11

e.

5+3

6

5

4 6-2

f.



8

10

2. What makes the numbers 1 to 10? Fill in and find out.

0

















9

1

















5







8

Revision-2

1. Do on the number line.

- 5 + 3 =
- b. 0 1 2 3 4 5 6 7 8 9 10
- 6 + 2 =
- C.
 1

 0
 1

 2
 3

 4
 5

 6
 7

 8
 9

 10
- 9 5 =
- 5 5 =
- 6 5 =

2. Add.

- a. 8 + 4 =__ e.

- b. 11 + 6 = __ d. 15 + 0 = __
- + 2

3. Subtract.

- a. 9-4= ___ c. 18-0= ___ e.
 - 14 f.

- b. 12 6 =__ d. 7 7 =__