

LEVEL 8

LEARNING



Addition and Subtraction

Published by
Color Pencil®

About the book

Vedic Math influenced math learning and activities. More than 1700% times faster than regular Math. It enhances in sharpening the mind, increases mental agility and intelligence. Increases speed and accuracy. It improves memory and boosts self-confidence. It helps in developing the left and right sides of the brain. Easy to master and apply.

Copyright © 2020 by ColorPencil

ISBN: Hardback: 978-1-63649-444-9

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner.

Print information available on the last page

Rev. date: 21st September 2020

To order additional copies of this book, contact:



www.colorpencil.com
hello@colorpencil.com

Nearest 100's

Explanation: To find nearest hundreds, check tens place. If tens place is 5 or more than 5, add one to the hundreds place number and put 0 for tens and units place. Otherwise, put 0 for units and tens place and write the remaining digits as it is.

Example :

Find nearest hundreds of 4286

Tens place is 8 which is more than 5, so add 1 to the hundreds place number (2+1) and put 0 for tens and units place.

Nearest hundreds of 4286 is 4300

Find nearest hundreds of 1729

Tens place is 2 which is less than 5, so put 0 for tens and units place and write the remaining digit as it is.

Nearest hundreds of 1729 is 1700.

Exercise 8

Write nearest 100's

1) 2362 –

2) 4737 –

3) 3581 –

4) 5617 –

5) 1296 –



Below base addition

Explanation : To add below base number, first add the nearest base number using base number addition and then subtract the difference.

Example : $3295 + 1999$

The nearest base of 1999 is 2000 and is 1 less than 2000. So first add 2000 and then subtract 1.

$$3295 + 2000 - 1 = 5294$$

$$4873 + 598$$

The nearest base of 598 is 600 and is 2 less than 600. So first add 600 and then subtract 2.

$$4873 + 600 - 2 = 5471$$

$$1597 + 87$$

The nearest base of 87 is 90 and is 3 less than 90. So first add 90 and then subtract 3.

$$1597 + 90 - 3 = 1684$$

Exercise 16

Below base addition

1) $3248 + 37 =$

2) $9328 + 59 =$

3) $1827 + 28 =$

4) $6354 + 79 =$

5) $5879 + 19 =$



Exercise 22

Subtraction (same digits in between)

1) $3456 - 1252$

2) $5871 - 2275$

3) $9354 - 3756$

4) $4843 - 1820$

5) $7286 - 2257$



Subtract from unity base numbers (lesser number of digits)

Explanation : In this case, the minuend is the unity base number, but the number of zeros of the minuend is not equal to the number of digits of the subtrahend. If the subtrahend has lesser number of digits, put imaginary 0s in front of the subtrahend to make it equal to the number of zeros of the minuend, then apply "All from 9 and the last from 10" to get the answer. If the subtrahend end with 0s, don't apply the formula for the last 0s, the digit before 0 is like last digit and it should be subtracted from 10.

Example: $1000 - 42$

The minuend has three 0s and the subtrahend has two digits, put imaginary 0 in front of the subtrahend to make it three digit number. Then, apply "All from 9 and the last from 10" to get the answer.

$$1000 - 042$$

$$9 - 0 = 9, 9 - 4 = 5, 10 - 2 = 8$$

$$\text{The answer is } 1000 - 42 = 958$$

$$10000 - 730$$

The minuend has four 0s and the subtrahend has three digits, put imaginary 0 in front of the subtrahend to make it four digits. Apply the formula "All from 9 and the last from 10", the subtrahend end with 0, so the digit before 0 is like last digit and it should be subtracted from 10, write the answer with last 0s.

$$10000 - 0730$$

$$9 - 0 = 9, 9 - 7 = 2, 10 - 3 = 7$$

$$\text{The answer is } 10000 - 730 = 9270$$



www.colorpencil.com

Published by
Color Pencil®



LEVEL 9
LEARNING



**Multiplication and
Division**

Published by
Color Pencil®

About the book

Vedic Math influenced math learning and activities. More than 1700% times faster than regular Math. It enhances in sharpening the mind, increases mental agility and intelligence. Increases speed and accuracy. It improves memory and boosts self-confidence. It helps in developing the left and right sides of the brain. Easy to master and apply.

Copyright © 2020 by ColorPencil

ISBN: Hardback: 978-1-63649-447-0

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner.

Print information available on the last page

Rev. date: 21st September 2020

To order additional copies of this book, contact:



Color Pencil®

www.colorpencil.com

hello@colorpencil.com

Exercise 3

3-digit by 2-digit multiplication using moving multiplier

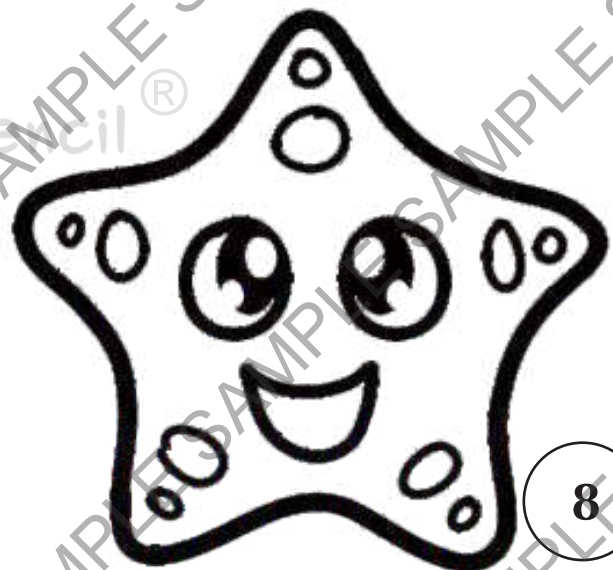
1) 412×23

2) 563×18

3) 169×59

4) 670×15

5) 205×64



2) 33×56

3) 44×18

4) 72×55

5) 66×40



Duplex

Explanation : Duplex is a special concept from ancient Indian Mathematics system which is used to find square and square roots. Duplex of single digit number is nothing but square of the number. Duplex of two digit number is product of the digits times 2.

Example :

$$\text{Duplex of } 4 = 4 \times 4 = 16$$

$$\text{Duplex of } 37 = 3 \times 7 \times 2 = 42$$

Exercise 14

Find duplex

1) 6 -

2) 8 -

3) 9 -

4) 10 -

5) 17 -



DIVISION

Straight division – no remainder

Explanation: To divide a number by a single digit number, we can use straight division. In this method, divide the first digit by the divisor, write the quotient at the top and remainder before the next digit. Now move to the next number, repeat this division till the last digit. The number at the top is called quotient and the remainder from the last step is the final remainder.

Example: $8735 \div 5$

$$\begin{array}{r} 1747 \\ 5 \overline{) 8735} \\ \underline{5} \\ 37 \\ \underline{35} \\ 23 \\ \underline{20} \\ 35 \\ \underline{35} \\ 0 \end{array}$$

Quotient = 1747

$$8735 \div 5 = 1747$$

Exercise 21

Find quotient

1) $3578 \div 2$





www.colorpencil.com

Published by
Color Pencil®

ISBN 978-163649447-0



9 781636 494470

US \$14.99



51499

LEVEL 10

LEARNING



Integers and Vinculum

Published by
Color Pencil®

About the book

Vedic Math influenced math learning and activities. More than 1700% times faster than regular Math. It enhances in sharpening the mind, increases mental agility and intelligence. Increases speed and accuracy. It improves memory and boosts self-confidence. It helps in developing the left and right sides of the brain. Easy to master and apply.

Copyright © 2020 by ColorPencil

ISBN: Hardback: 978-1-63649-449-4

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner.

Print information available on the last page

Rev. date: 21st September 2020

To order additional copies of this book, contact:



Color Pencil®

www.colorpencil.com

hello@colorpencil.com

Divisibility check for 2, 3, 4, 5, 6, 8, 9 and 10

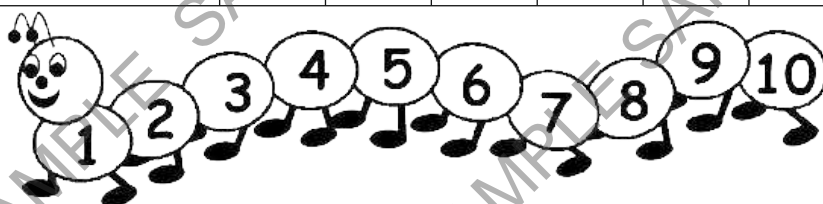
Explanation:

- Divisibility check for 2 - The number ends with 0, 2, 4, 6 or 8
- Divisibility check for 3 - Digit sum is 3, 6 or 9
- Divisibility check for 4 - Divide last two digits by 2 two times or divide by 4 once, or end with two zeros
- Divisibility check for 5 - The number ends with 0 or 5
- Divisibility check for 6 - $6 = 2 \times 3$, it should satisfy divisibility check for 2 and 3
- Divisibility check for 8 - Divide last three digits by 2 three times or divide by 8 once or end with three zeros
- Divisibility check for 9 - Digit sum is 9
- Divisibility check for 10 - The number ends with 0

Exercise 6

Check divisibility for 2, 3, 4, 5, 6, 8, 9 and 10, write Yes if the number is divisible or No if the number is not divisible

S.No.	Number	2	3	4	5	6	8	9	10
1	24								
2	35								
3	66								
4	81								
5	96								



LCM and HCF of multiples

Explanation: This is a special method or shortcut method to find LCM and HCF. If the given numbers are multiples, the bigger number is a multiple of the smaller number, then LCM is the bigger number and HCF is the smaller number.

Example : Find LCM and HCF of 74 and 37

74 is a multiple of 37, so LCM is 74 and HCF is 37

Exercise 12

Find LCM and HCF of multiples

S.No.	Numbers	LCM	HCF
1	4, 16		
2	27, 9		
3	80, 10		
4	11, 99		
5	75, 15		



Descending order

Explanation : Descending order is arranging numbers from big to small.

Example :

$\overline{39}$	22	$\overline{71}$	65
65	22	$\overline{39}$	$\overline{71}$

Exercise 20

Arrange in descending order

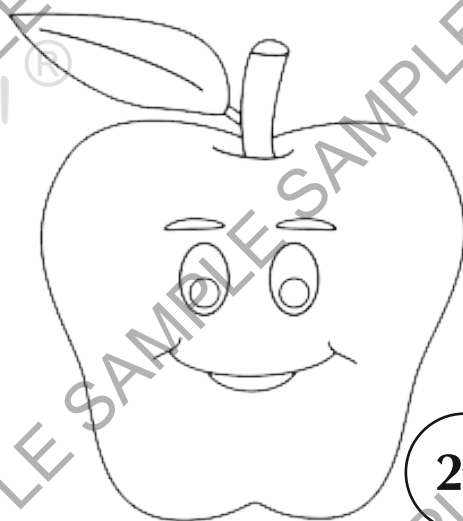
1)	14	7	17	8

2)	$\overline{21}$	15	$\overline{26}$	18

3)	$\overline{83}$	46	$\overline{29}$	$\overline{31}$

4)	$\overline{12}$	$\overline{19}$	$\overline{7}$	$\overline{32}$

5)	$\overline{46}$	31	$\overline{52}$	$\overline{17}$



Vinculum

Explanation : Vinculum numbers are partial negative numbers. In vinculum numbers, we can reduce the number into smaller size so that we can make the calculations fast. In this method, we convert 6, 7, 8 and 9 into negative numbers. If 6, 7, 8 or 9 at the first digit, we can increase or decrease it, but we can't change the sign. If number of digits are more, we can split the numbers to convert into vinculum numbers.

To convert to vinculum numbers, increase the digit before the bigger digit by 1 and write a pair of the bigger digit with bar to represent negative digit. If more than one digit is big, apply "All from 9 and the last from 10" and write with bar to represent negative digit.

Example: Convert to vinculum numbers

69

69 is close to 70 and is 1 less.

$$69 = 7\bar{1}$$

489

489 is close to 500 and is 11 less than 500.

$$489 = 5\bar{1}\bar{1}$$

592

Here, 9 in the middle, so split the number as 59 and 2, we can write 59 as $6\bar{1}$, and write 2 as it is.

$$592 = 6\bar{1}2$$

538

538 is close to 540 and 2 less than 540.

$$538 = 54\bar{2}$$





www.colorpencil.com

Published by
Color Pencil®

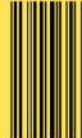
ISBN 978-163649449-4



9 781636 494494

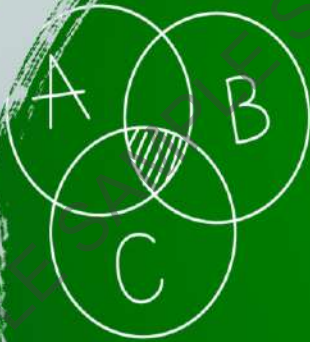
US \$24.99

51499



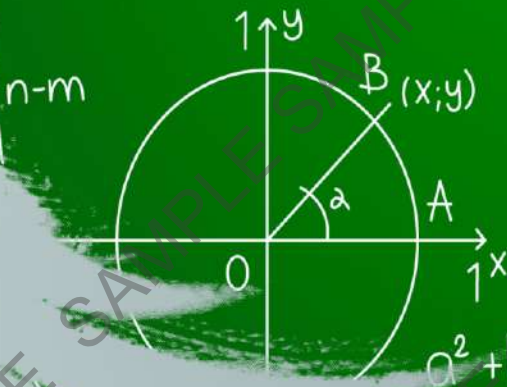
LEVEL 11

LEARNING



$$\overline{ctga}$$

$$AB = \sqrt{AB_x^2 + AB_y^2}$$

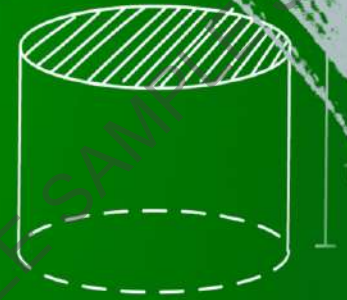


$$\frac{1}{ctga}$$

$$\cos \alpha = x$$

$$a^2 + b^2 = c^2$$

$$(x+y)^2 - (x-y)^2$$



$$(x+y)^2 - (x-y)^2$$

$$A_x + B_y = C$$

$$\sin^2(\alpha) + \cos^2(\alpha) = 1$$

Fractions and Decimals

About the book

Vedic Math influenced math learning and activities. More than 1700% times faster than regular Math. It enhances in sharpening the mind, increases mental agility and intelligence. Increases speed and accuracy. It improves memory and boosts self-confidence. It helps in developing the left and right sides of the brain. Easy to master and apply.

Copyright © 2020 by ColorPencil

ISBN: Hardback: 978-1-63649-451-7

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner.

Print information available on the last page

Rev. date: 21st September 2020

To order additional copies of this book, contact:



www.colorpencil.com
hello@colorpencil.com

Exercise 6

Circle the bigger fraction

1) $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$

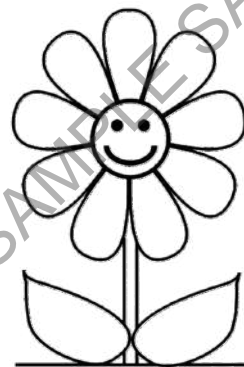
2) $\frac{2}{5}$, $\frac{2}{3}$, $\frac{1}{3}$

3) $\frac{4}{5}$, $\frac{1}{3}$, $\frac{5}{6}$

4) $\frac{2}{3}$, $\frac{3}{4}$, $\frac{2}{5}$

5) $\frac{4}{7}$, $\frac{2}{5}$, $\frac{1}{6}$

Color Pencil®



Fraction addition with same denominators

Explanation : To add fractions with same denominator, add numerators and write with the same denominator. Simplify the answer if possible and write the answer in proper or mixed fraction.

Example: $\frac{6}{7} + \frac{4}{7}$

$$\frac{6}{7} + \frac{4}{7} = \frac{6+4}{7} = \frac{10}{7}$$

$\frac{10}{7}$ is an improper fraction, convert into mixed fraction.

Divide 10 by 7 gives quotient 1 and the remainder 3.

$$\frac{10}{7} = 1 \frac{3}{7}$$

$$\frac{6}{7} + \frac{4}{7} = 1 \frac{3}{7}$$

Exercise 13

Add the following fractions

1) $\frac{1}{2} + \frac{1}{2}$

2) $\frac{2}{3} + \frac{2}{3}$

3) $\frac{1}{4} + \frac{2}{4}$

4) $\frac{4}{5} + \frac{3}{5}$

5) $\frac{4}{6} + \frac{5}{6}$



Addition of whole number and fraction

Explanation : Addition of whole number and fraction is same as conversion of mixed number into improper fraction. Multiply the denominator with the whole number and add to the numerator, this is the numerator of the answer and write with the same denominator of the fraction.

Example : $6 + \frac{5}{7}$

$$6 \times 7 + 5 = 42 + 5 = 47$$

$$6 + \frac{5}{7} = \frac{47}{7}$$

Exercise 20

Add whole number and fraction

1) $3 + \frac{1}{2}$

4) $4 + \frac{3}{4}$

2) $1 + \frac{1}{4}$

5) $5 + \frac{1}{4}$

3) $5 + \frac{2}{3}$



Decimal standard form

Explanation : Powers of ten in the denominator represent the number is after the decimal point. 10 in the denominator represents the number is in tenths place and 100 in the denominator represents the number is in hundredths place.

Example : Convert into decimal

$$\frac{5}{10}$$

10 in the denominator represents the number is in tenths place.

$$\frac{5}{10} = 0.5$$

$$\frac{2}{100}$$

100 in the denominator represents the number is in hundredths place and put 0 for missing (tenth) places.

$$\frac{2}{100} = 0.02$$

Exercise 29

Convert into decimal

1) $\frac{3}{10} =$

2) $\frac{4}{100} =$

3) $\frac{8}{10} =$

4) $\frac{7}{100} =$

5) $\frac{6}{100} =$





www.colorpencil.com

Published by
Color Pencil®

ISBN 978-163644451-7



9 781636 444517

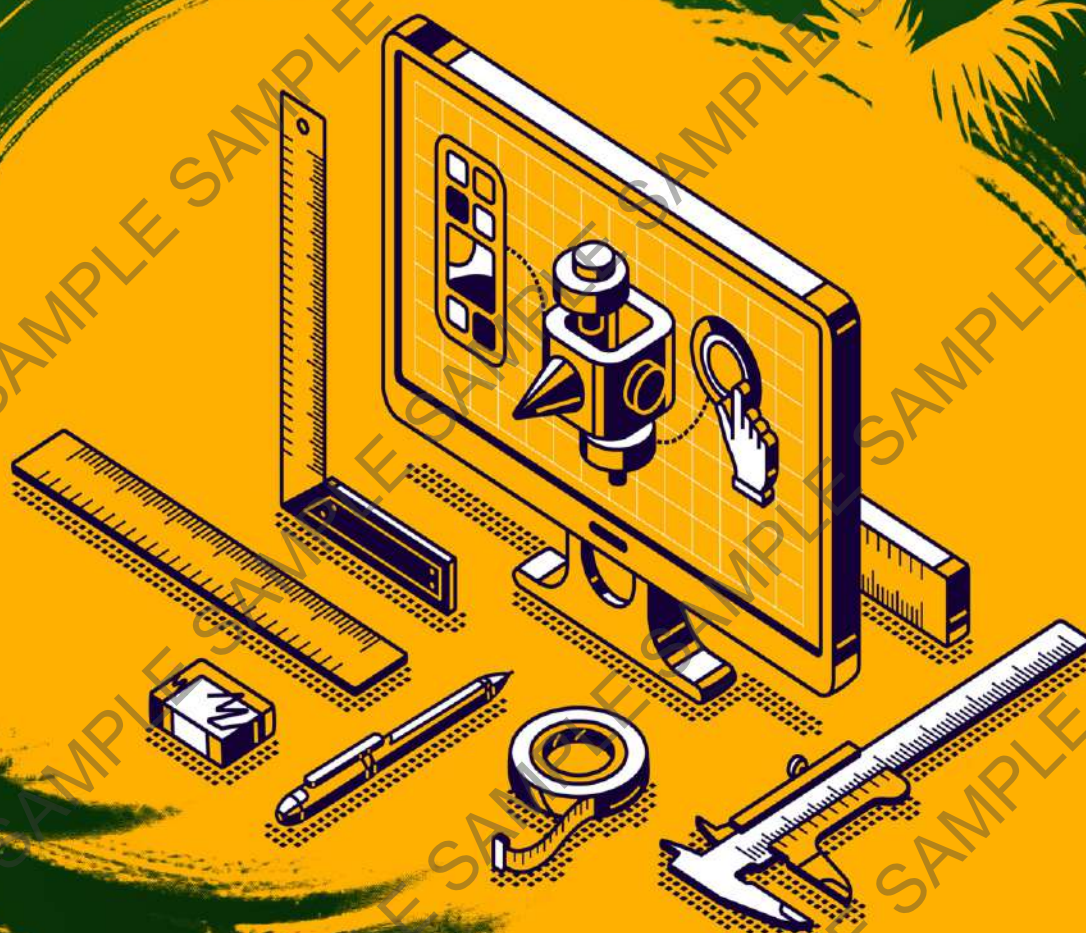
ISBN 978-163644451-7



51499

LEVEL 12

LEARNING



Percentages and Measurement

Published by
Color Pencil®

About the book

Vedic Math influenced math learning and activities. More than 1700% times faster than regular Math. It enhances in sharpening the mind, increases mental agility and intelligence. Increases speed and accuracy. It improves memory and boosts self-confidence. It helps in developing the left and right sides of the brain. Easy to master and apply.

Copyright © 2020 by ColorPencil

ISBN: Hardback: 978-1-63649-453-1

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner.

Print information available on the last page

Rev. date: 21st September 2020

To order additional copies of this book, contact:



www.colorpencil.com
hello@colorpencil.com

Halving in division

Explanation: Divide by 2 is nothing but half of the number and divide by 4 is nothing but half the number twice.

Example: Do division using halving

$$776 \div 2$$

$$\text{Halving of } 776 = 388$$

$$776 \div 2 = 388$$

$$3532 \div 4$$

$$\text{Halving of } 3532 = 1766$$

$$\text{Halving of } 1766 = 883$$

$$3532 \div 4 = 883$$

Exercise 8

Do division using halving

1) $28 \div 2$

2) $156 \div 2$

3) $492 \div 4$

4) $700 \div 4$

5) $962 \div 2$



F) Kilo units to metric units

$$1 \text{ km} = 1000 \text{ m}$$

$$1 \text{ kg} = 1000 \text{ g}$$

$$1 \text{ kl} = 1000 \text{ l}$$

Example : Convert 9.4 kg into grams

$$9.4 \times 1000 = 9400$$

$$9.4 \text{ kg} = 9400 \text{ g}$$

Exercise 13F

Convert into metric units

1) 4 km

2) 3.7 kl

3) 8.5 kg

G) Yards to feet

$$1 \text{ yard} = 3 \text{ feet}$$

Example: Convert 31 yd into feet

$$31 \times 3 = 93$$

$$31 \text{ yd} = 93 \text{ ft}$$

Exercise 13G

Convert into feet

1) 4 yd

2) 7 yd

3) 15 yd

Measurement addition

Explanation : To add any two quantities, it must be in the same unit. First convert into same unit (convert to smaller unit is easier than convert to bigger unit), add, and write the answer with unit.

Example : $3000 \text{ mm} + 5.5 \text{ m}$

Convert 5.5 m into mm

$$5.5 \times 1000 = 5500$$

$$3000 + 5500 = 8500$$

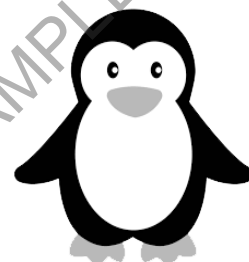
$$3000 \text{ mm} + 5.5 \text{ m} = 8500 \text{ mm}$$

Exercise 16

Convert into same unit and do addition

1) $3 \text{ hrs} + 300 \text{ min}$ 2) $6 \text{ day} + 48 \text{ hrs}$ 3) $30 \text{ cm} + 80 \text{ mm}$

4) $4 \text{ kg} + 5000 \text{ gm}$ 5) $12 \text{ lb} + 816 \text{ oz}$



3) $b = 56 \text{ cm}$ $h = 22 \text{ cm}$

4) $b = 42 \text{ cm}$ $h = 99 \text{ cm}$

5) $b = 83 \text{ m}$ $h = 62 \text{ m}$





www.colorpencil.com

Published by
Color Pencil®

ISBN 978-163649453-1



9 781636 494531

ISBN 978-163649453-1



51499

LEVEL 8

ACTIVITY



Addition and Subtraction

Published by
Color Pencil®

About the book

Vedic Math influenced math learning and activities. More than 1700% times faster than regular Math. It enhances in sharpening the mind, increases mental agility and intelligence. Increases speed and accuracy. It improves memory and boosts self-confidence. It helps in developing the left and right sides of the brain. Easy to master and apply.

Copyright © 2020 by ColorPencil

ISBN: Hardback: 978-1-63649-445-6

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner.

Print information available on the last page

Rev. date: 21st September 2020

To order additional copies of this book, contact:



Color Pencil®

www.colorpencil.com

hello@colorpencil.com

Exercise 6

Write O for odd numbers and E for even numbers

1) 68

2) 71

3) 90

4) 103

5) 211

6) 378

7) 444

8) 560

9) 617

10) 758

11) 889

12) 928

13) 1000

14) 1457

15) 2808

16) 3781

17) 4090

18) 5577

19) 6973

20) 7111

21) 7774

22) 8575

23) 8298

24) 9009

25) 9874



Exercise 16

Below base addition

1) $3248 + 37 =$

2) $9328 + 59 =$

3) $1827 + 28 =$

4) $6354 + 79 =$

5) $5879 + 19 =$

6) $2393 + 99 =$

7) $7256 + 69 =$

8) $4085 + 498 =$

9) $8127 + 199 =$

10) $5256 + 597 =$

11) $7182 + 399 =$

12) $1438 + 797 =$

13) $9274 + 298 =$

14) $6292 + 699 =$

15) $8555 + 599 =$

16) $3872 + 999 =$

17) $1628 + 6997 =$

18) $2657 + 2999 =$

19) $3536 + 4997 =$

20) $4586 + 3998 =$



9) 9156 - 3864

10) 2728 - 1953

11) 3482 - 2826

12) 8340 - 1726

13) 6183 - 3574

14) 5325 - 2794

15) 2051 - 1468

16) 7372 - 2594



Exercise 26

Below base subtraction

1) $437 - 99$

2) $859 - 298$

3) $787 - 49$

4) $603 - 79$

5) $217 - 57$

6) $5326 - 1998$

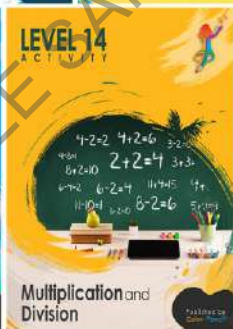
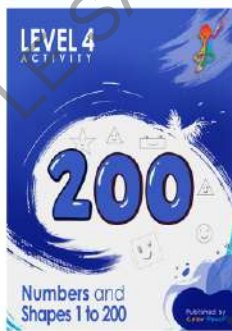
7) $9087 - 4997$

8) $6257 - 4999$

9) $3486 - 599$

10) $1756 - 298$





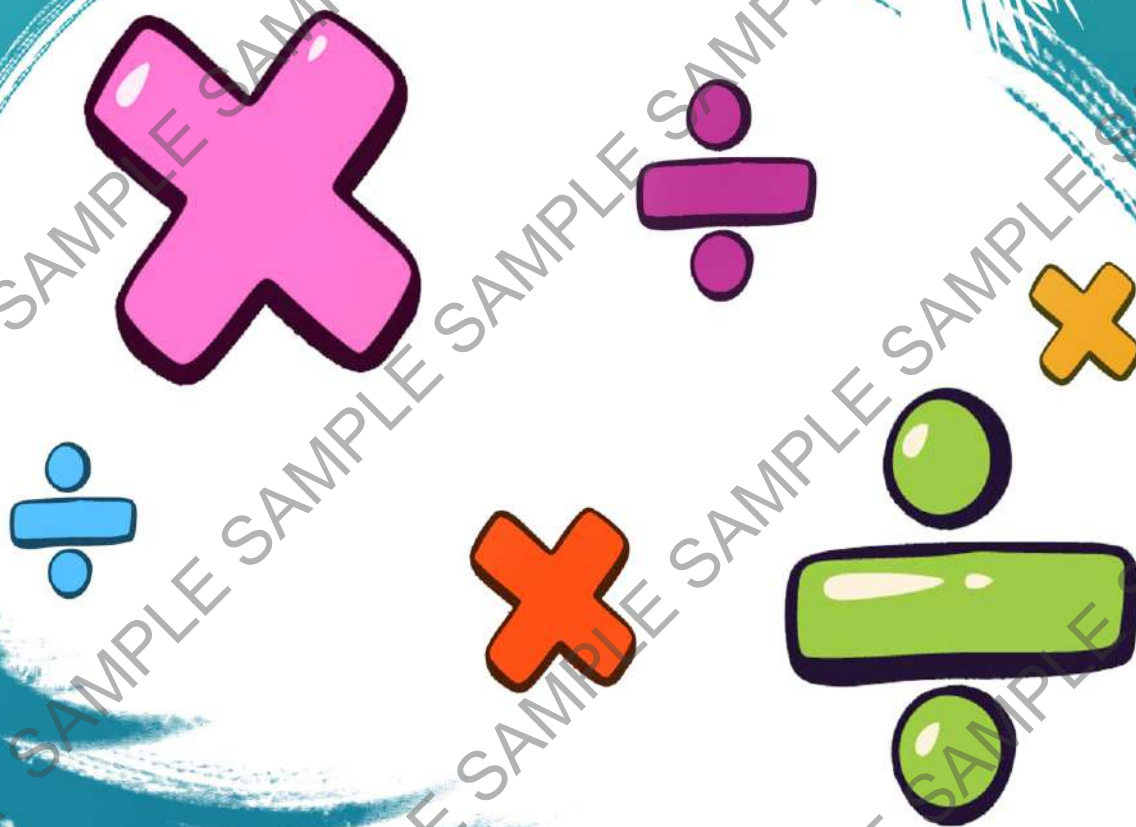
www.colorpencil.com

Published by
Color Pencil®



LEVEL 9

ACTIVITY



Multiplication and Division

Published by
Color Pencil®

About the book

Vedic Math influenced math learning and activities. More than 1700% times faster than regular Math. It enhances in sharpening the mind, increases mental agility and intelligence. Increases speed and accuracy. It improves memory and boosts self-confidence. It helps in developing the left and right sides of the brain. Easy to master and apply.

Copyright © 2020 by ColorPencil

ISBN: Hardback: 978-1-63649-446-3

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner.

Print information available on the last page

Rev. date: 21st September 2020

To order additional copies of this book, contact:



Color Pencil®

www.colorpencil.com
hello@colorpencil.com

10) 4361×63

11) 5963×11

12) 3628×22

13) 6086×34

14) 1562×45

15) 7147×26

16) 2403×87

17) 8115×32

18) 3674×56

19) 9305×10

20) 4853×25



Exercise 11

Multiply – Same tens and pairs in units

1) $17 \times 13 =$

11) $32 \times 38 =$

2) $22 \times 28 =$

12) $46 \times 44 =$

3) $36 \times 34 =$

13) $53 \times 57 =$

4) $45 \times 45 =$

14) $68 \times 62 =$

5) $63 \times 67 =$

15) $71 \times 79 =$

6) $78 \times 72 =$

16) $88 \times 82 =$

7) $81 \times 89 =$

17) $93 \times 97 =$

8) $99 \times 91 =$

18) $58 \times 52 =$

9) $15 \times 15 =$

19) $65 \times 65 =$

10) $27 \times 23 =$

20) $74 \times 76 =$

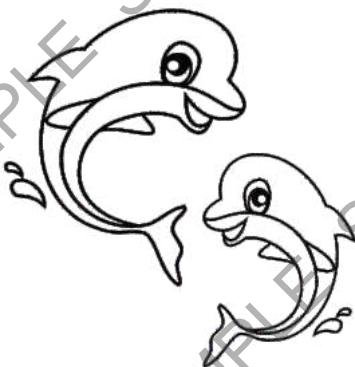


S. No	Numbers	Square	Digit sum	Units place
16	16^2			
17	17^2			
18	18^2			
19	19^2			
20	20^2			
21	21^2			
22	22^2			
23	23^2			
24	24^2			
25	25^2			

Observation

Units place of the square numbers are _____

Digit sum of the square numbers are _____



Exercise 24

Straight division with 2 digit divisor

1) $48 \div 12$

2) $60 \div 15$

3) $32 \div 16$

4) $88 \div 11$

5) $72 \div 24$

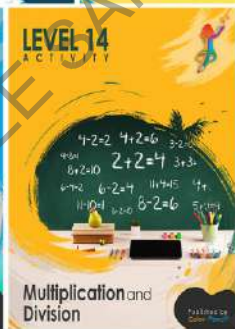
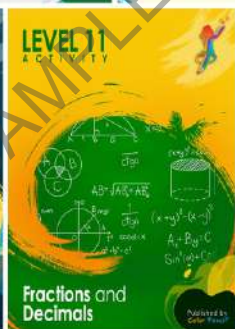
6) $99 \div 33$

7) $74 \div 37$

8) $50 \div 25$

9) $41 \div 41$





www.colorpencil.com

Published by
Color Pencil®

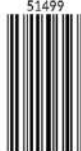
ISBN 978-163649446-3



9 781636 494463

US \$14.99

51499



LEVEL 10

ACTIVITY



Integers and Vinculum

Published by
Color Pencil®

About the book

Vedic Math influenced math learning and activities. More than 1700% times faster than regular Math. It enhances in sharpening the mind, increases mental agility and intelligence. Increases speed and accuracy. It improves memory and boosts self-confidence. It helps in developing the left and right sides of the brain. Easy to master and apply.

Copyright © 2020 by ColorPencil

ISBN: Hardback: 978-1-63649-448-7

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner.

Print information available on the last page

Rev. date: 21st September 2020

To order additional copies of this book, contact:



www.colorpencil.com
hello@colorpencil.com

Exercise 6

Check divisibility for 2, 3, 4, 5, 6, 8, 9 and 10, write Yes if the number is divisible or No if the number is not divisible

S.No.	Number	2	3	4	5	6	8	9	10
1	24								
2	35								
3	66								
4	81								
5	96								
6	101								
7	273								
8	640								
9	911								
10	720								
11	896								
12	999								
13	1133								
14	3465								
15	4180								
16	5103								
17	5335								
18	6180								
19	8316								
20	7272								

11) 46, 39

12) 57, 38

13) 45, 65

14) 53, 23

15) 62, 31



Color Pencil®



Exercise 16

Circle the smaller number

1) 14 $\overline{36}$ $\overline{81}$ $\overline{12}$

2) $\overline{43}$ $\overline{7}$ $\overline{13}$ $\overline{78}$

3) 26 38 12 51

4) $\overline{10}$ $\overline{7}$ 6 5

5) 56 $\overline{56}$ 65 $\overline{65}$

6) 10 $\overline{20}$ 30 $\overline{40}$

7) $\overline{8}$ 7 9 $\overline{6}$

8) 36 $\overline{72}$ $\overline{40}$ 80

9) 8 4 0 6

10) 26 62 $\overline{51}$ 15

11) $\overline{30}$ $\overline{20}$ 10 40

12) $\overline{22}$ 88 $\overline{66}$ $\overline{77}$

13) 3 $\overline{16}$ 12 4

14) 42 $\overline{43}$ $\overline{44}$ $\overline{45}$

15) $\overline{77}$ $\overline{80}$ 39 $\overline{56}$

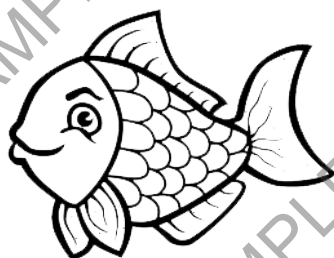
16) 7 $\overline{17}$ $\overline{27}$ 37

17) $\overline{26}$ $\overline{42}$ $\overline{59}$ $\overline{72}$

18) $\overline{90}$ 89 $\overline{88}$ 5

19) 63 $\overline{36}$ $\overline{96}$ 69

20) $\overline{24}$ $\overline{86}$ $\overline{68}$ $\overline{42}$



Exercise 24

Integer multiplication

1) $3 \times 4 =$

2) $\overline{6} \times 3 =$

3) $2 \times \overline{8} =$

4) $\overline{5} \times \overline{4} =$

5) $\overline{9} \times \overline{6} =$

6) $6 \times \overline{8} =$

7) $7 \times 7 =$

8) $\overline{8} \times \overline{9} =$

9) $7 \times \overline{8} =$

10) $9 \times 9 =$

11) $\overline{10} \times \overline{2} =$

12) $\overline{3} \times 9 =$

13) $4 \times \overline{7} =$

14) $5 \times 5 =$

15) $\overline{6} \times 0 =$

16) $9 \times \overline{7} =$

17) $\overline{8} \times 8 =$

18) $5 \times \overline{10} =$

19) $\overline{10} \times \overline{4} =$

20) $\overline{9} \times 4 =$





www.colorpencil.com

Published by
Color Pencil®

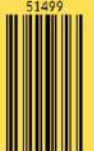
ISBN 978-163649448-7



9 781636 494487

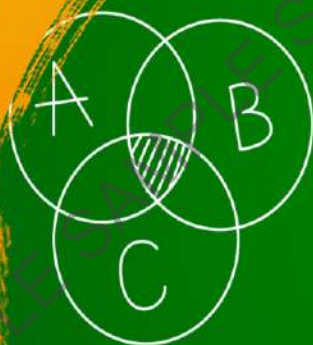
US \$34.99

51499



LEVEL 11

ACTIVITY



$$\overline{ctga}$$

$$AB = \sqrt{AB_x^2 + AB_y^2}$$



$$\frac{1}{ctga}$$

$$\cos \alpha = x$$

$$a^2 + b^2 = c^2$$

$$(x+y)^2 - (x-y)^2$$



$$(x+y)^2 - (x-y)^2$$

$$A_x + B_y = C$$

$$\sin^2(\alpha) + \cos^2(\alpha) = 1$$

Fractions and Decimals

About the book

Vedic Math influenced math learning and activities. More than 1700% times faster than regular Math. It enhances in sharpening the mind, increases mental agility and intelligence. Increases speed and accuracy. It improves memory and boosts self-confidence. It helps in developing the left and right sides of the brain. Easy to master and apply.

Copyright © 2020 by ColorPencil

ISBN: Hardback: 978-1-63649-450-0

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner.

Print information available on the last page

Rev. date: 21st September 2020

To order additional copies of this book, contact:



Color Pencil®

www.colorpencil.com
hello@colorpencil.com

11) $\frac{2}{9}$, $\frac{1}{2}$, $\frac{3}{7}$

12) $\frac{6}{8}$, $\frac{5}{9}$, $\frac{2}{7}$

13) $\frac{1}{8}$, $\frac{2}{3}$, $\frac{5}{7}$

14) $\frac{3}{9}$, $\frac{4}{5}$, $\frac{4}{7}$

15) $\frac{1}{2}$, $\frac{2}{9}$, $\frac{3}{8}$

16) $\frac{6}{7}$, $\frac{3}{5}$, $\frac{2}{6}$

17) $\frac{3}{8}$, $\frac{1}{5}$, $\frac{2}{3}$

18) $\frac{5}{7}$, $\frac{8}{9}$, $\frac{6}{8}$

19) $\frac{7}{10}$, $\frac{7}{9}$, $\frac{7}{8}$

20) $\frac{9}{10}$, $\frac{3}{5}$, $\frac{6}{8}$



Exercise 12

Find answers

1) $\frac{3}{3} =$

2) $\frac{4}{1} =$

3) $\frac{0}{5} =$

4) $\frac{8}{8} =$

5) $\frac{9}{0} =$

6) $\frac{10}{1} =$

7) $\frac{6}{6} =$

8) $\frac{2}{1} =$

9) $\frac{4}{0} =$

10) $\frac{0}{6} =$

11) $\frac{12}{12} =$

12) $\frac{15}{1} =$

13) $\frac{7}{7} =$

14) $\frac{17}{0} =$

15) $\frac{21}{1} =$

16) $\frac{0}{25} =$

17) $\frac{19}{19} =$

18) $\frac{23}{1} =$

19) $\frac{0}{16} =$

20) $\frac{30}{0} =$



11) $\square - \frac{3}{10} = \frac{4}{10}$

12) $\square - \frac{4}{11} = \frac{5}{11}$

13) $\square - \frac{6}{12} = \frac{6}{12}$

14) $\square - \frac{7}{13} = \frac{3}{13}$

15) $\square - \frac{5}{14} = \frac{7}{14}$

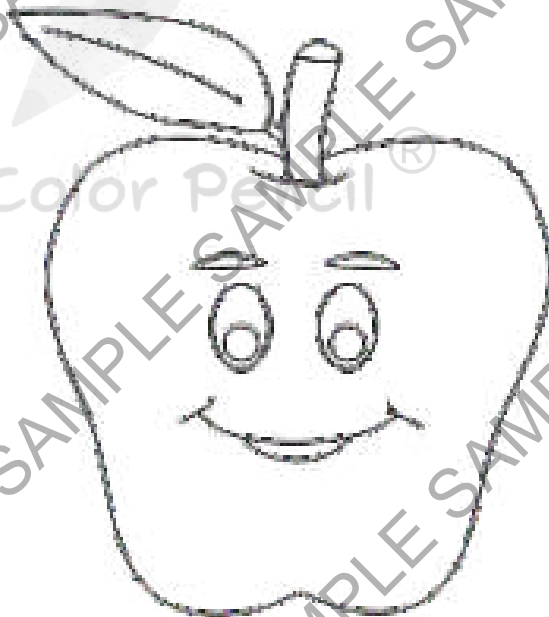
16) $\square - \frac{1}{15} = \frac{3}{15}$

17) $\square - \frac{9}{16} = \frac{6}{16}$

18) $\square - \frac{2}{17} = \frac{15}{17}$

19) $\square - \frac{7}{18} = \frac{10}{18}$

20) $\square - \frac{5}{19} = \frac{11}{19}$



Exercise 25

Write place value for the underlined number

1) $3.\underline{1}4$ –

11) $1.\underline{8}\underline{3}$ –

2) $\underline{4}6.\underline{2}7$ –

12) $\underline{4}8.\underline{6}7$ –

3) $7.\underline{8}\underline{3}$ –

13) $39.\underline{1}5$ –

4) $2\underline{9}.5$ –

14) $7\underline{6}.\underline{0}1$ –

5) $86.\underline{0}\underline{3}$ –

15) $25.\underline{4}7$ –

6) $7\underline{5}.\underline{6}2$ –

16) $\underline{5}3.\underline{1}6$ –

7) $80.\underline{0}\underline{9}$ –

17) $18.\underline{9}2$ –

8) $\underline{6}.66$ –

18) $3\underline{7}.\underline{4}6$ –

9) $92.\underline{4}7$ –

19) $7.\underline{2}\underline{1}$ –

10) $0.\underline{4}9$ –

20) $0.\underline{8}3$ –





www.colorpencil.com

Published by
Color Pencil®

ISBN 978-163649-450-0



9 781636 494500

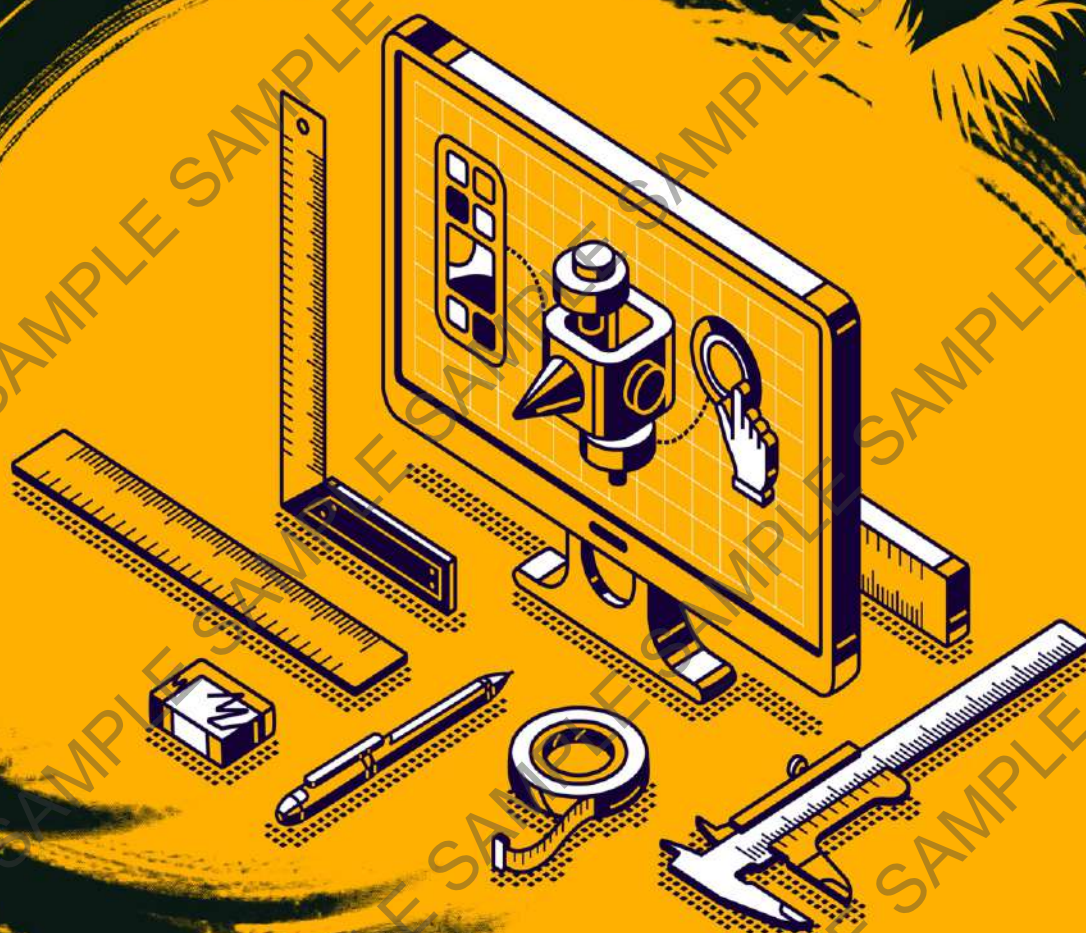
ISBN 978-163649-514-9



514597

LEVEL 12

ACTIVITY



Percentages and Measurement

Published by
Color Pencil®

About the book

Vedic Math influenced math learning and activities. More than 1700% times faster than regular Math. It enhances in sharpening the mind, increases mental agility and intelligence. Increases speed and accuracy. It improves memory and boosts self-confidence. It helps in developing the left and right sides of the brain. Easy to master and apply.

Copyright © 2020 by ColorPencil

ISBN: Hardback: 978-1-63649-452-4

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner.

Print information available on the last page

Rev. date: 21st September 2020

To order additional copies of this book, contact:



Color Pencil®

www.colorpencil.com

hello@colorpencil.com

Exercise 7

Do multiplication using doubling

1) 35×2

2) 246×4

3) 87×2

4) 190×4

5) 95×2

6) 250×4

7) 319×2

8) 555×4

9) 653×2

10) 714×4

11) 825×2

12) 900×4

Exercise 13A

Convert into minutes

1) 3 hrs

2) 12 hrs

3) 56 hrs

4) 60 hrs

5) 18 hrs

6) 20 hrs

7) 43 hrs

8) 48 hrs

9) 35 hrs

10) 29 hrs



Exercise 14A

Convert into hours

1) 60 min

2) 360 min

3) 420 min

4) 660 min

5) 780 min

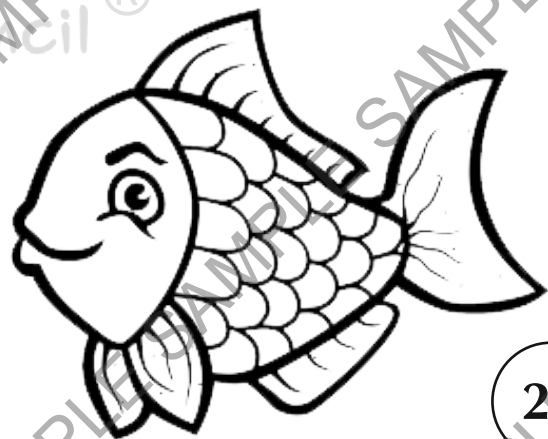
6) 1500 min

7) 2040 min

8) 2460 min

9) 3840 min

10) 4620 min



Exercise 15

Put appropriate sign $<$, $>$, or $=$

1) 6 hrs 240 min

11) 5 kg 7000 gm

2) 240 hrs 12 days

12) 300 ft 90 yd

3) 4 cm 40 mm

13) Rs. 5.65 700 pa

4) 750 gm 1 kg

14) 16 lb 256 oz

5) 12 lb 160 oz

15) 3000 mm 3 mm

6) ₪ 475 \$ 2.25

16) 5 hrs 360 min

7) 0.4 m 4000 mm

17) 72 in 5 ft

8) 420 in 35 ft

18) 5 days 120 hrs

9) 4.5 km 6750 m

19) 6 kl 7250 l

10) 950 pa Rs. 8

20) 170 mm 2.5 cm





www.colorpencil.com

Published by
Color Pencil®

