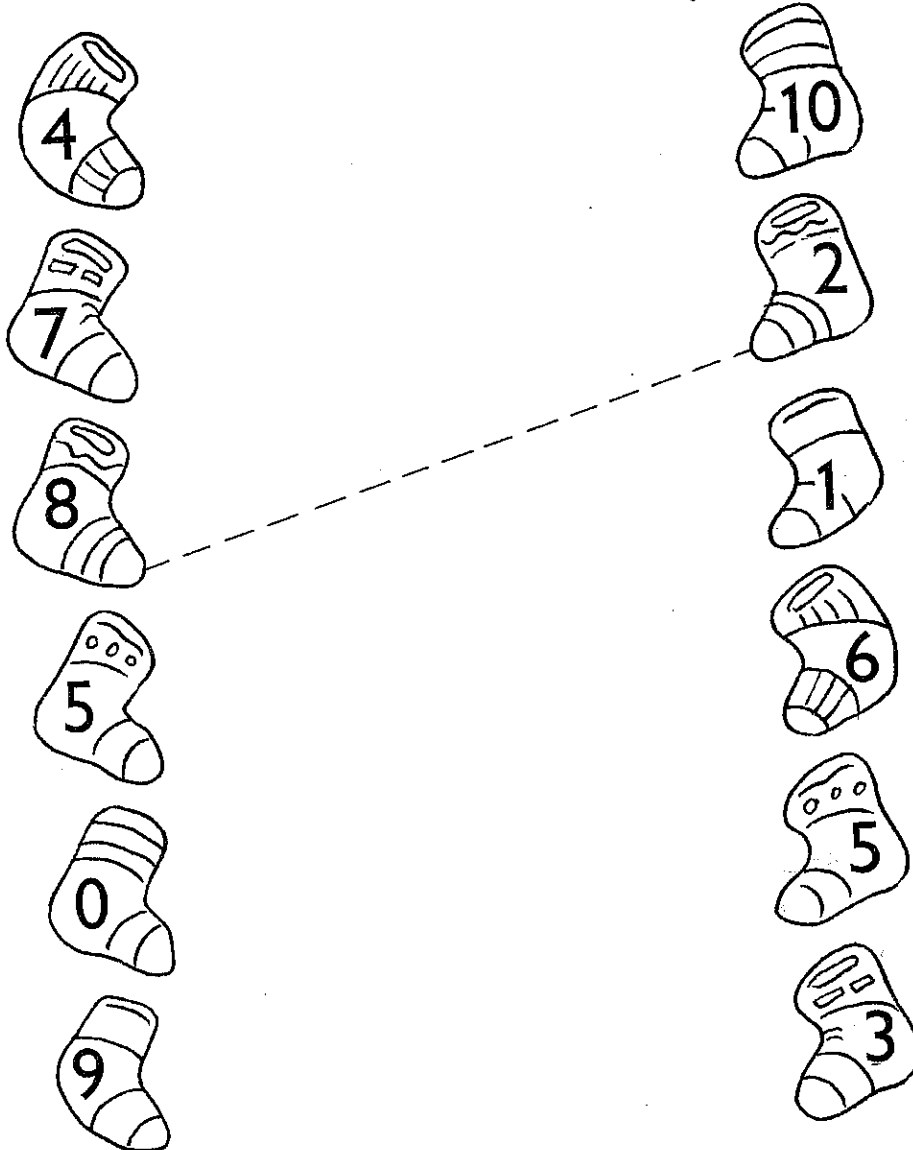


EXERCISE 9

1. Join each pair of Mr. Ten's socks.

The numbers on each pair should make 10.



2. Color the correct amount of money.

(a)



40¢



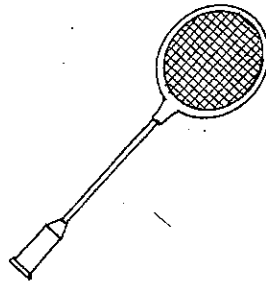
(b)



85¢



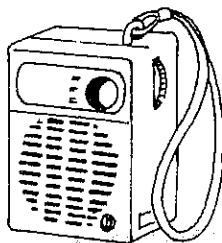
(c)



\$17



(d)



\$28



Grade 2 - A

EXERCISE 58

1. Write the missing numbers.

$1 \times 3 = 3$	$3 \div 3 = 1$
$2 \times 3 = 6$	$6 \div 3 = 2$
$4 \times 3 = 12$	$12 \div 3 = 4$
$5 \times 3 = 15$	$15 \div 3 = 5$
$3 \times 3 = 9$	$9 \div 3 = 3$
$10 \times 3 = 30$	$30 \div 3 = 10$
$7 \times 3 = 21$	$21 \div 3 = 7$
$9 \times 3 = 27$	$27 \div 3 = 9$
$6 \times 3 = 18$	$18 \div 3 = 6$
$8 \times 3 = 24$	$24 \div 3 = 8$

2. M

3. Fill in the missing numbers.

(a) $100 - \square = 41$

(b) $100 - 58 = \square$

(c) $\square + 63 = 100$

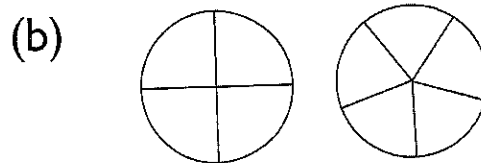
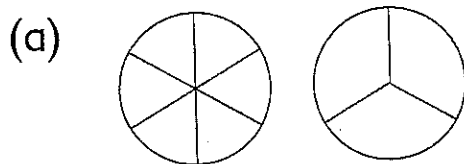
(d) $24 + \square = 100$

4. Add or subtract.

(a) $108 + 42 =$	(b) $249 + 51 =$
(c) $365 + 135 =$	(d) $598 + 243 =$
(e) $486 - 90 =$	(f) $647 - 98 =$
(g) $875 - 250 =$	(h) $372 - 299 =$

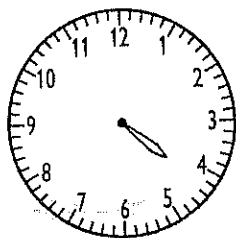
5. Color to show each pair of fractions.

Then write **greater than** ($>$), **less than** ($<$) or **equal to** ($=$) in the blank.

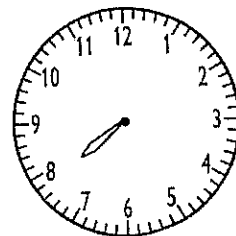


$\frac{4}{6}$ is _____ $\frac{2}{3}$. $\frac{3}{4}$ is _____ $\frac{4}{5}$.

6. Draw the minute hand on each clock face to show the time.



10 minutes past 4



15 minutes to 8

EXERCISE 12 *Grade 3-A*

1. Subtract and write the answers in the boxes.

Across

- A. $9101 - 2759$
C. $8290 - 4986$
D. $6000 - 486$
F. $9400 - 6869$
I. $5102 - 897$
J. $6400 - 4439$

Down

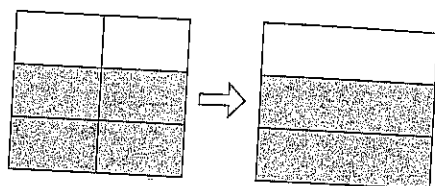
- A. $7032 - 778$
B. $8070 - 5635$
D. $7968 - 2240$
E. $4005 - 2678$
G. $7533 - 4492$
H. $8144 - 485$

EXERCISE 34

Grade 3-8

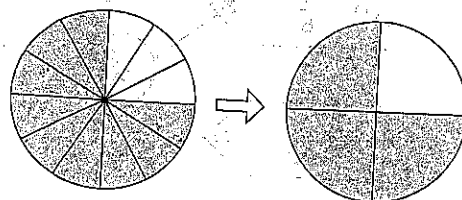
1. Write the missing numerators and denominators.

(a)



$$\frac{4}{6} \xrightarrow{+2} \frac{\quad}{\quad} \xrightarrow{+2} \frac{\quad}{\quad}$$

(b)



$$\frac{9}{12} \xrightarrow{+3} \frac{\quad}{\quad} \xrightarrow{+3} \frac{\quad}{\quad}$$

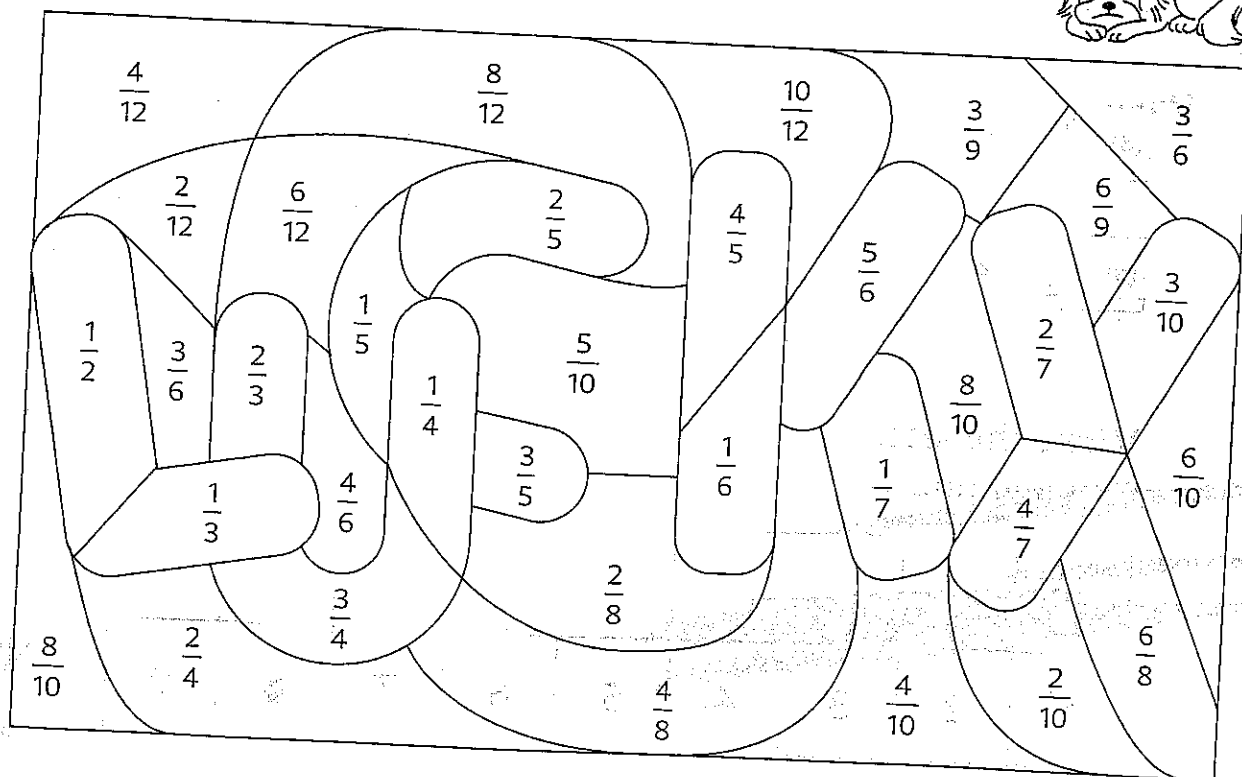
2. Write each fraction in its simplest form.

(a) $\frac{5}{10} =$

(b) $\frac{6}{9} =$

(c) $\frac{4}{12} =$

3. Color the spaces in which the fraction is in its simplest form. You will find the name of Simon's dog.



Grade 4-B

24. 1650 students took part in a parade.
There were twice as many boys as girls.
How many boys were there in the parade?

$$\begin{array}{r} 532 \\ 3 \overline{) 1650} \\ \underline{15} \\ 15 \\ \underline{15} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

$$\begin{array}{r} 532 \\ 532 \\ \hline 1064 \end{array}$$

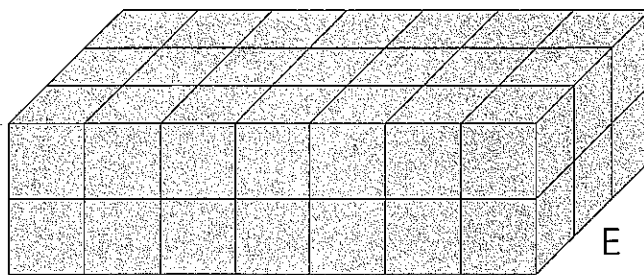
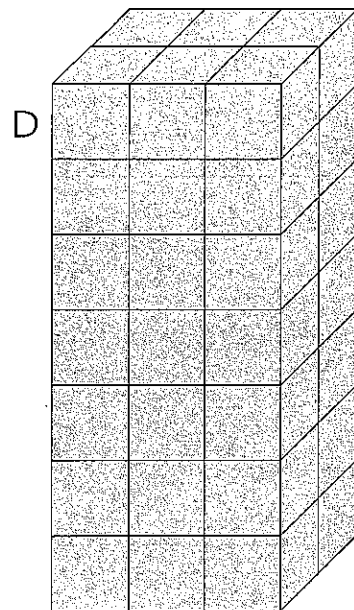
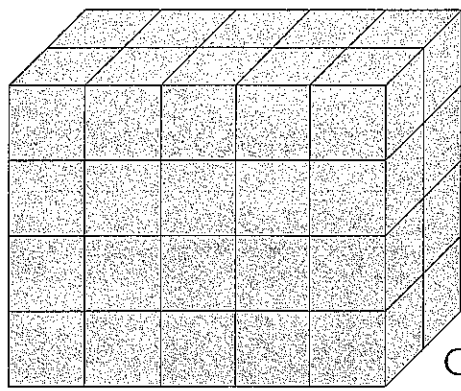
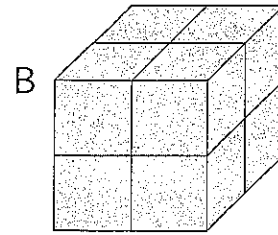
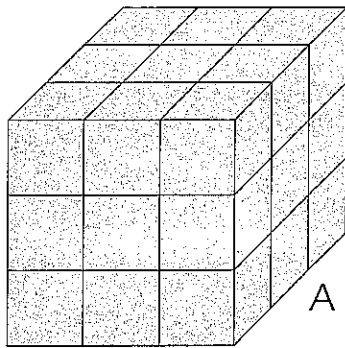
25. Mrs. Rowley bought a refrigerator.
She paid a down payment of \$160 and 8 monthly installments
of \$95 each.
How much did she pay altogether?

$$\begin{array}{r} 48 \\ 95 \\ \hline 160 \end{array}$$

$$\begin{array}{r} 160 \\ 760 \\ \hline 920 \end{array}$$

EXERCISE 50

1. These solids are made up of 1-in. cubes.



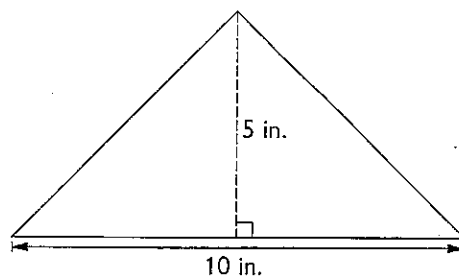
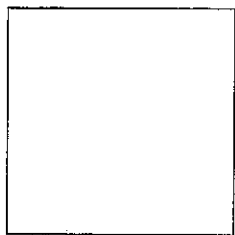
Complete the following table.

Solid	Length	Width	Height	Volume
A	3 in.	3 in.	3 in.	27 in. ³
B	2	2	2	8 in.
C	2	5	4	40 in.
D	2	3	7	42 in.
E	3	7	2	42 in.

Grade 5-A

23. The ratio of Bill's money to Henry's money was 5 : 6. After Bill spent \$800 on a TV set, the ratio became 1 : 2. How much money did Henry have?

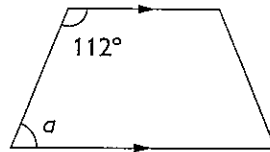
-
24. The area of the square is the same as the area of the triangle. Find the perimeter of the square.



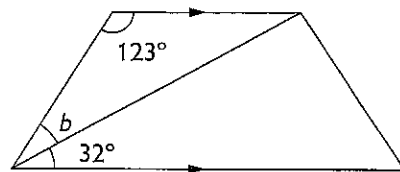
EXERCISE 47

1. The following trapezoids are not drawn to scale. Find the unknown marked angles.

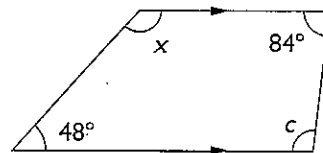
(a)



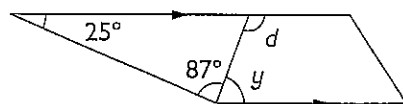
(b)



(c)



(d)



Grade 6-A

9. Mrs. Long bought a cake. She kept $\frac{1}{4}$ of it and divided the rest into 2 equal parts. What fraction of a whole cake is each part?

10. Tyler has 4 times as much money as Ryan. Find the ratio of Ryan's money to Tyler's money.

11. $\frac{2}{5}$ of the workers in a factory are females. Find the ratio of the number of male workers to the number of female workers.

12. The ratio of Joe's weight to Colin's is 2 : 3. Colin's weight is 36 kg.
(a) Express Joe's weight as a fraction of Colin's weight.

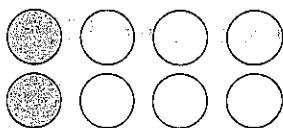
- (b) If Joe gains 3 kg, what will be the new ratio of Joe's weight to Colin's?

13. Melissa mixed 400 g of cashew nuts with 600 g of peanuts to make 1 kg of mixed nuts.

- (a) Find the ratio of the weight of cashew nuts to the weight of peanuts.

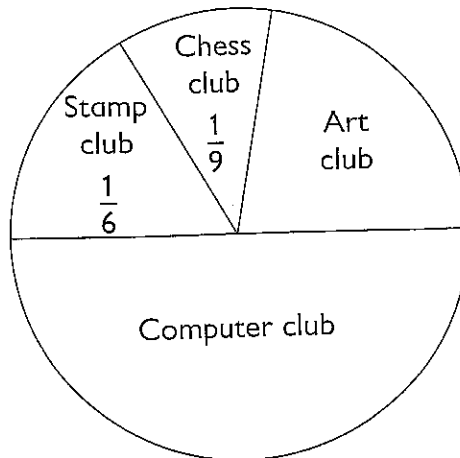
- (b) If she wants to make 500 g of mixed nuts by mixing cashew nuts and peanuts in the same ratio, how many grams of cashew nuts does she need?

14. What percentage of the circles are shaded?



Grade 6-B

3. A group of 180 students were asked to choose the club they would like to join. The pie chart represents their choices.



- (a) What fraction of the students chose the computer club?

- (b) What fraction of the students chose the art club?

- (c) How many students chose the chess club?

- (d) How many students chose the stamp club?

- (e) How many more students chose the stamp club than the chess club?

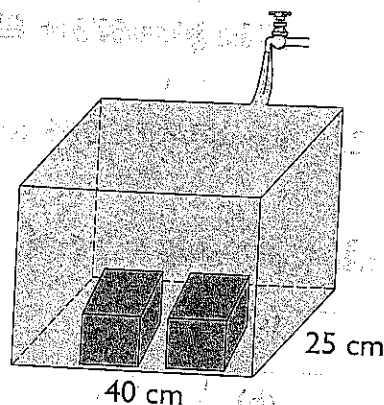
Grade 6-B

water
s
e,

4. An empty rectangular tank, 40 cm long and 25 cm wide, contains 2 metal cubes of edge 10 cm. The tank is being filled with water flowing from a tap at a rate of 10 liters per minute. If it takes 3 minutes to fill up the tank, find the height of the tank.
(1 liter = 1000 cm³)

30 cm

m



Grade 2 - Intensive Practice
Supplemental Book

Take the **Challenge!**

1. The numbers 1 to 1000 are placed in this order on a number chart.

Column A	Column B	Column C	Column D	Column E
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23		

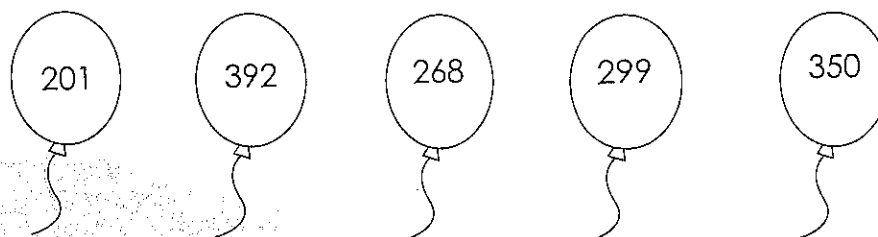
Part of the chart is torn. Study the pattern.
Which column does each of these numbers belong to?

423	571	162	850	209
-----	-----	-----	-----	-----

Column:

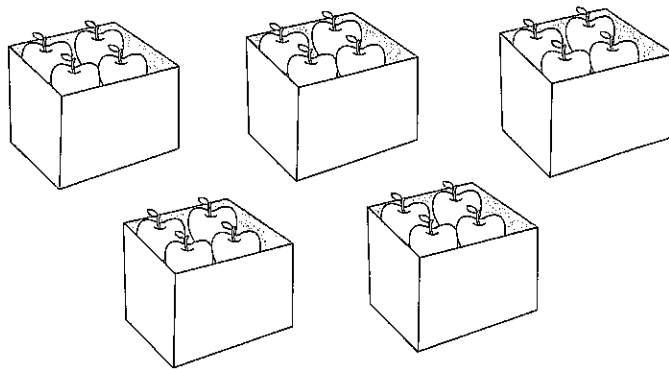
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2. What number am I?
I am more than 20 tens.
I am less than 300.
I am between $200 + 60$ and 4 hundreds.
Color the correct balloon.



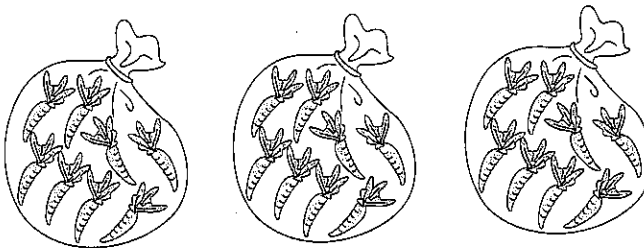
Grade 2 - Intensive Practice

3. Look at the pictures. Fill in the blanks.



- (a) There are _____ boxes.
- (b) There are _____ apples in each box.
- (c) There are _____ apples altogether.
- (d) 5 fours = _____ groups of _____
 = _____ \times _____
 = _____ + _____ + _____ + _____ + _____
 = _____

4. Look at the pictures. Fill in the blanks.



- (a) There are _____ bags.
- (b) There are _____ carrots in each bag.
- (c) There are _____ carrots altogether.
- (d) 3 eights = _____ groups of _____
 = _____ \times _____
 = _____ + _____ + _____
 = _____

Grade 5 Intensive Practice

38. Find the value of

(a) $5 \times 9 + 56 \div 8 =$

(b) $81 \div 9 - 5 + 7 =$

(c) $16 + 64 \div 4 \times 7 =$

(d) $12 \div 3 \times 8 - 30 \div 2 =$

(e) $3 \times 6 - 65 \div 5 =$

(f) $34 - 7 \times 4 \div 14 =$

(g) $100 - 7 \times 42 \div 3 + 12 =$

(h) $17 + 54 \div 6 - 4 \times 5 =$

39. Find the value of

(a) $6 \times (4 + 7) =$

(b) $77 \div (23 - 12) =$

(c) $(6 \times 7) \div 2 + 29 =$

(d) $100 \div (17 + 3) - 5 =$

(e) $(93 - 76) \times 2 - 18 \div 3 =$

(f) $320 - (7 \times 30) \div 5 + 45 =$

(g) $144 \div 12 \times (4 + 2) - 34 =$

(h) $12 \times (15 - 8) \div 6 =$

40. What is the missing number in each box?

(a) $17 \times 9 + (\square \div 3) - 12 \times 2 = 138$

(b) $720 - \square \times 81 + 28 = 100$

41. I am thinking of some numbers. Examine the given clues and work backwards to find the numbers that I am thinking of.

(a) If you add 6 to the number and then halve the result, you will get 8.

(b) If you multiply the number by 9 and then add 3 to the result, you will get 75.

(c) If you subtract 5 from the number and then double the result, you will get 40.

(d) If you triple the number and subtract 4 from the result, you will get 80.

42. Insert the signs of operations to make each of the following number sentences correct.

Example: $(5 + 5 - 5) \div 5 = 1$

(a) $5 \square 5 \square 5 \square 5 = 25$

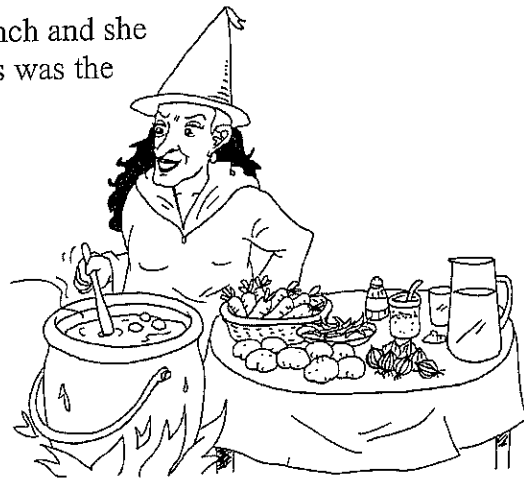
(b) $5 \square 5 \square 5 \square 5 = 0$



Topic 5: Ratio

1. Weird Witch invited her friends for lunch and she decided to cook her favorite soup. This was the **recipe** for the soup serving 12 people:

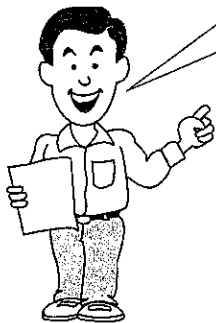
- 12 snake tails
- 18 moldy carrots
- 6 large rotten onions
- 8 large green potatoes
- 10 cups of pond water mixed with mud, salt and pepper



Fill in the blanks.

- (a) Following the recipe to prepare the soup for 12 people, Weird Witch needed
- (i) _____ cups of pond water,
 - (ii) _____ large rotten onions,
 - (iii) _____ moldy carrots,
 - (iv) _____ large green potatoes,
 - (v) _____ snake tails.
- (b) 6 friends were coming for lunch. Weird Witch found that she had only 4 potatoes that were green enough to be used. She would then need to change the recipe as follows:
- (i) _____ cups of pond water,
 - (ii) _____ large rotten onions,
 - (iii) _____ moldy carrots,
 - (iv) _____ snake tails.
- (c) From the recipe, the ratio of the number of snake tails to the number of cups of pond water to be used is _____ : _____

WORKED EXAMPLE 3



Randy and Bob had the same number of grapes. Randy ate 21 of his grapes and Bob ate 29 of his grapes. How many more grapes did Randy have than Bob in the end?

BEFORE

Randy

Bob

AFTER

Randy

?

21

Bob

29

$$29 - 21 = 8$$

Randy had **8** more grapes than Bob in the end.



Practice Problems

Answer each question carefully. Show your work and statements clearly.

1. Mandy bought 24 pens. She bought 11 more pens than Jane. How many pens did Jane buy?
2. Mrs. Smith prepared 380 meatballs for a party. If 60 meatballs were left after the party, how many meatballs were eaten during the party?
3. Susan made 415 paper birds and gave some of them away. If she had 300 paper birds left, how many paper birds did she give away?

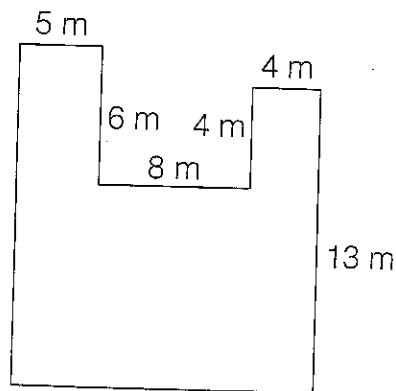


Grade 5 Word Problems

10. A rectangular photo frame has a length of 24 cm and an area of 432 cm^2 . In its center is a rectangular piece of photograph 3 cm away from its length and 2 cm away from its width. Find the area of the photo frame which is not covered by the photograph.

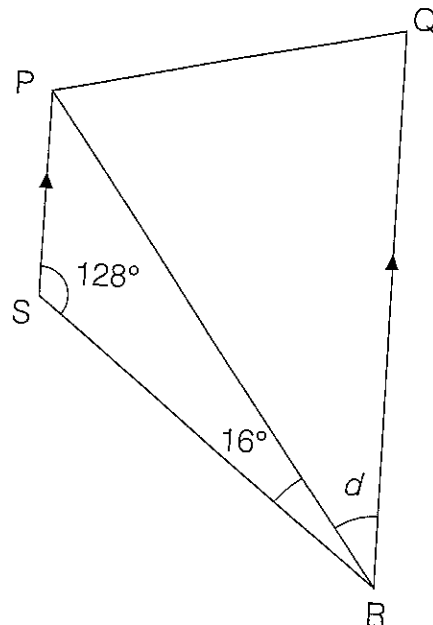
11. Carlos is training for his 4.8 km run on a rectangular running track. If the running track measures 50 m wide and has an area of 7500 m^2 , how many rounds around the track must he run?

12. The figure below is made from three rectangles. Find its area.

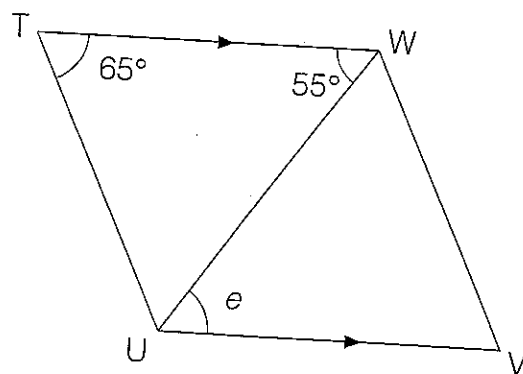


Grade 5 Word Problems

4. PQRS is a trapezoid. Find $\angle d$.



5. TUVW is a trapezoid. Find $\angle e$.



6. WXYZ is a trapezoid. Find $\angle f$.

