

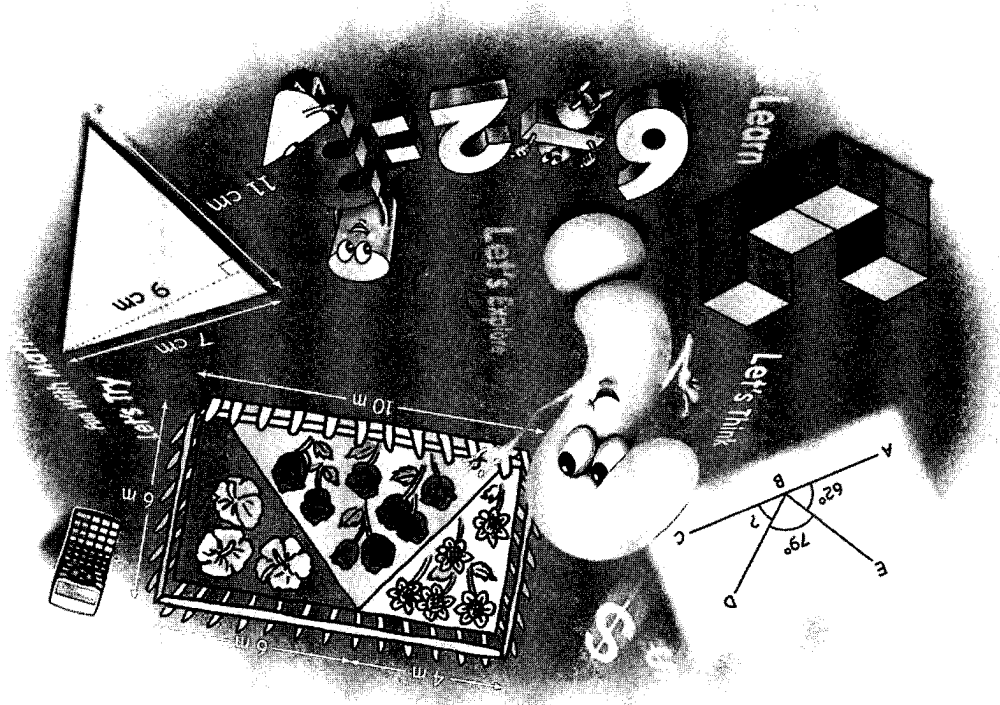
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Consultants:



5A WORKBOOK 2



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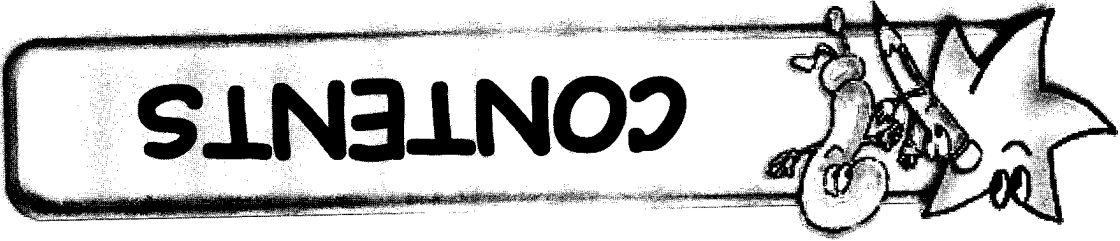
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4

Fractions (I)

WORKSHEET 13

Addition and Subtraction of Proper Fractions

Fractions

1. Add the fractions and write each answer in its simplest form.

Date:

(a) $\frac{3}{6} + \frac{4}{6}$

Diagram illustrating the addition of $\frac{3}{6} + \frac{4}{6}$. The result is $\frac{7}{6}$.

(b) $\frac{3}{5} + \frac{1}{3}$

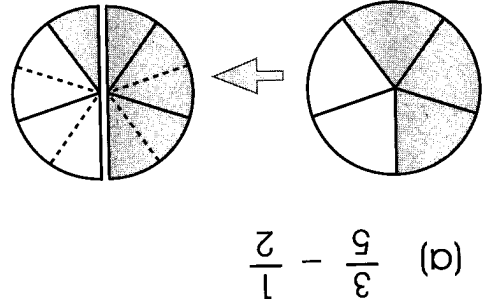
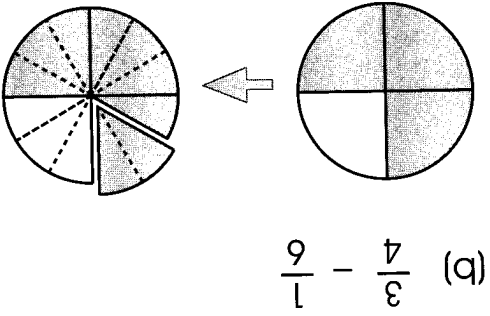
Diagram illustrating the addition of $\frac{3}{5} + \frac{1}{3}$. The result is $\frac{14}{15}$.

$$(e) \frac{1}{5} + \frac{6}{9}$$

$$(f) \frac{4}{3} + \frac{7}{10}$$

$$(c) \frac{6}{5} + \frac{4}{3}$$

$$(d) \frac{10}{3} + \frac{6}{1}$$



2. Subtract these fractions and write each answer in its simplest form.

$$(e) \frac{7}{10} - \frac{1}{4}$$

$$(f) \frac{9}{8} - \frac{5}{12}$$



$$(c) \frac{3}{2} - \frac{1}{7}$$

$$(d) \frac{8}{7} - \frac{5}{6}$$

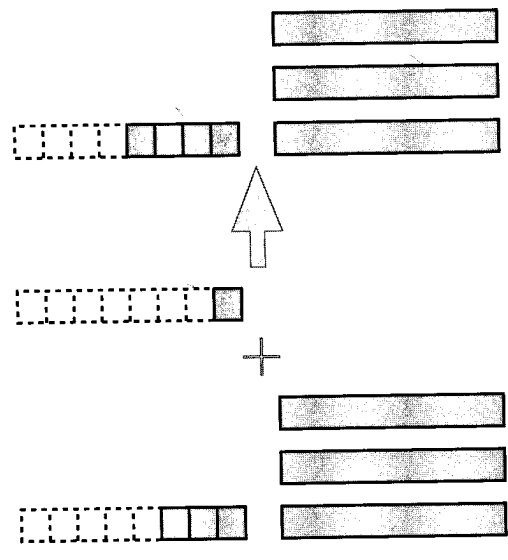
WORKSHEET 14

Date:

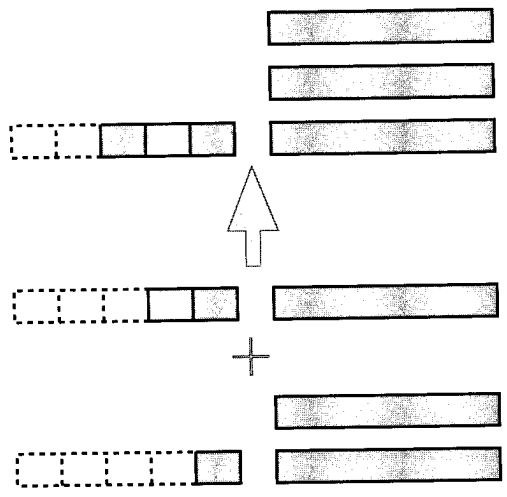
Addition and Subtraction Involving Mixed Numbers (I)

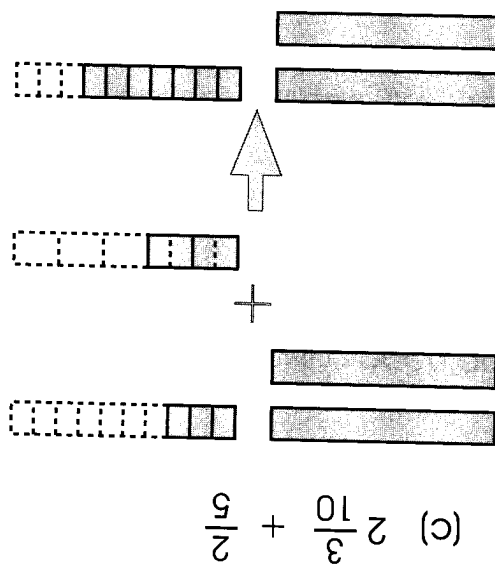
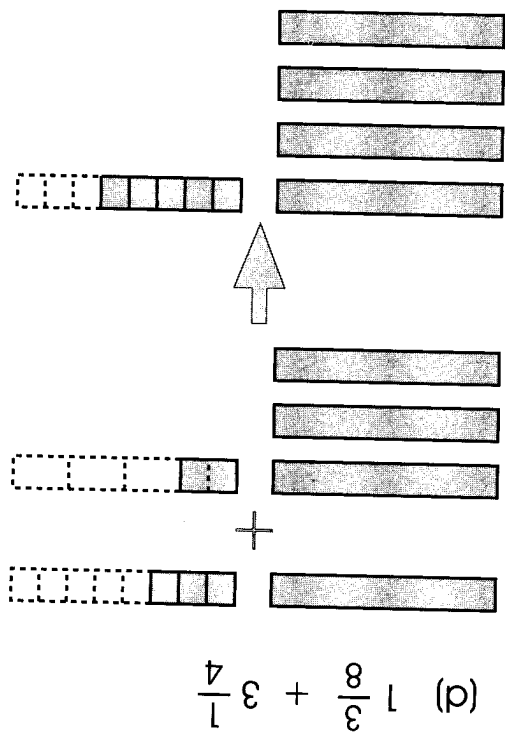
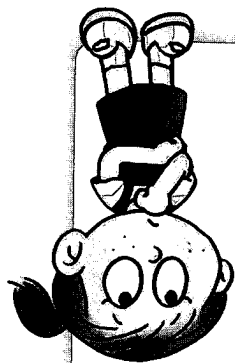
1. Without using a calculator, add the following and write each answer in its simplest form.

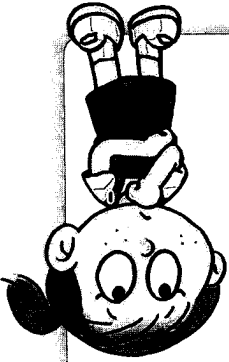
(a) $3\frac{3}{8} + 1\frac{1}{8}$



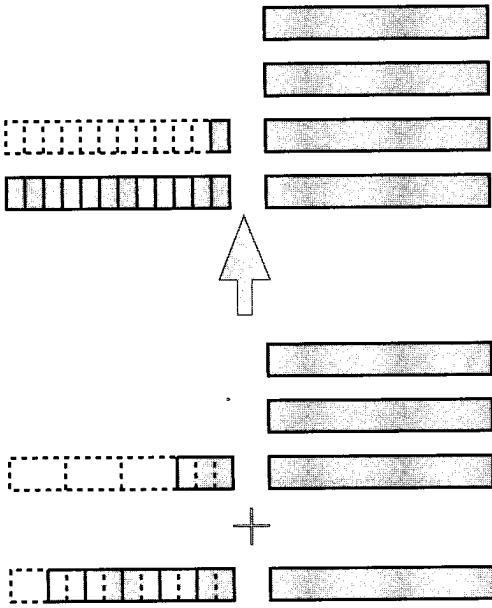
(b) $2\frac{1}{5} + 1\frac{2}{5}$



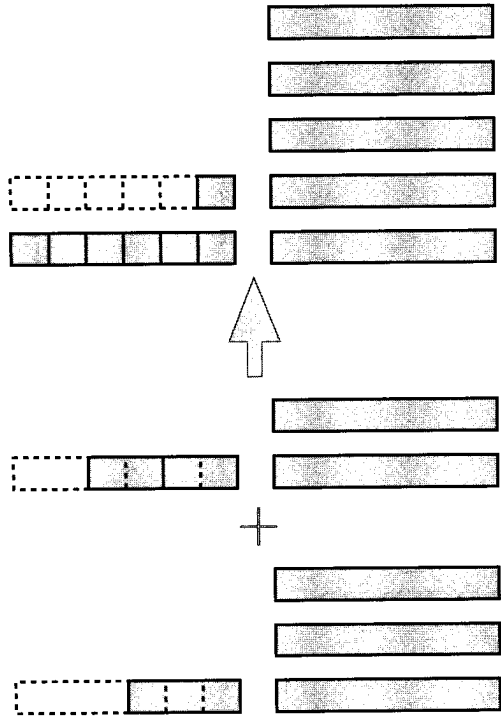




(f) $1\frac{6}{5} + 3\frac{1}{4}$

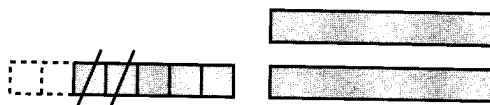


(e) $3\frac{1}{2} + 2\frac{3}{2}$

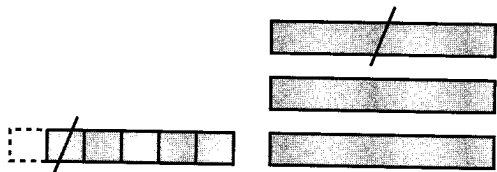


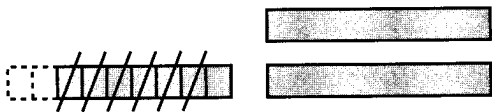
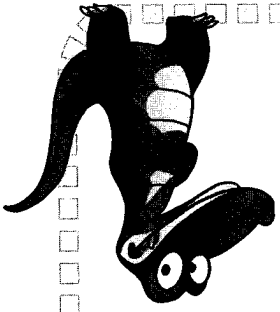
2. Without using a calculator, subtract the following and write each answer in its simplest form.

(a) $2\frac{5}{7} - \frac{2}{7}$

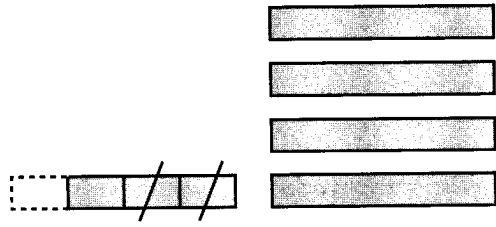


(b) $3\frac{6}{9} - 1\frac{1}{6}$

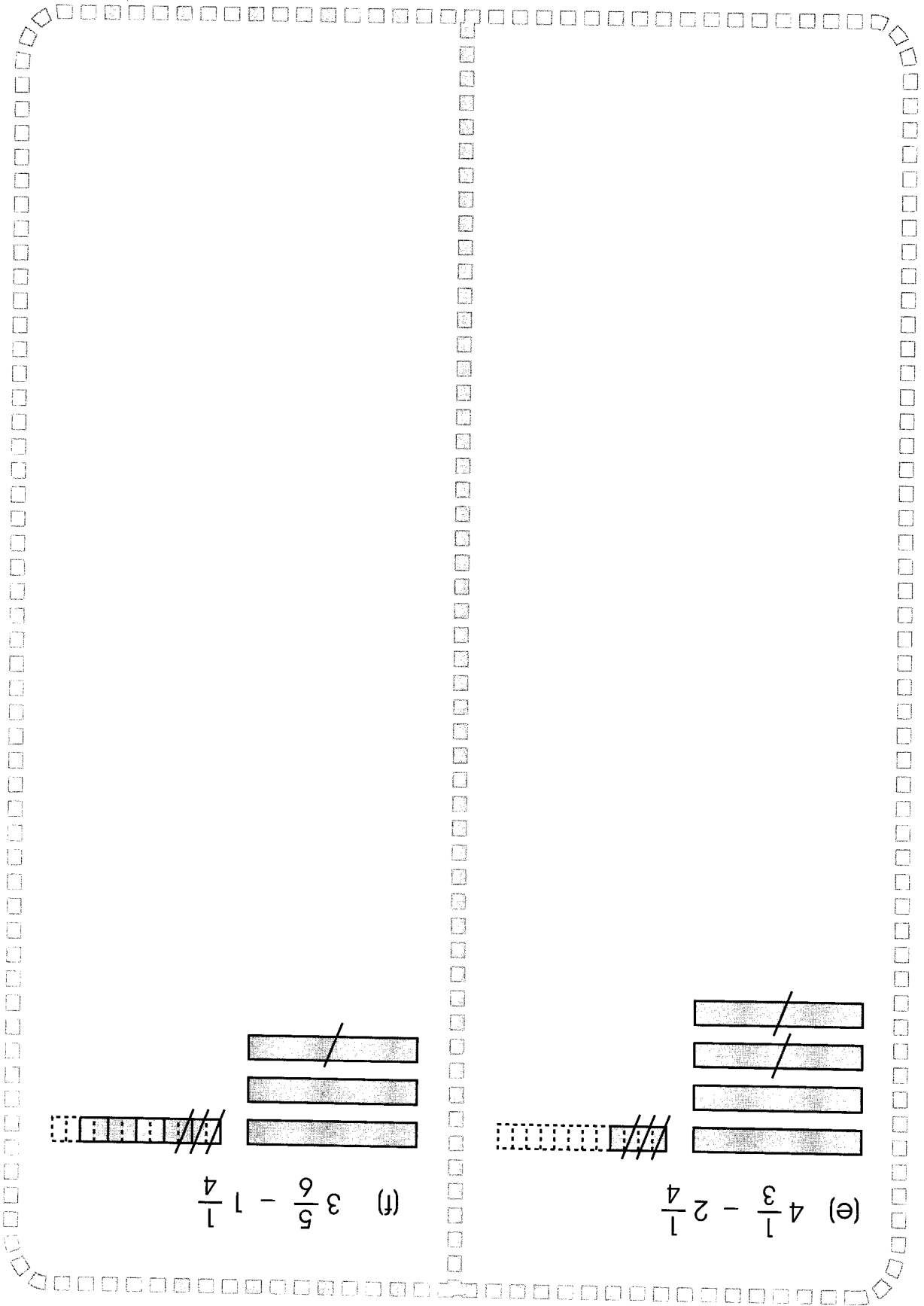




$$(d) \quad 2\frac{9}{7} - \frac{3}{2}$$



$$(c) \quad 4\frac{4}{3} - \frac{1}{2}$$



WORKSHEET 15

Addition and Subtraction Involving Mixed Numbers (II)



1. Add using a calculator.

(a) $1\frac{6}{5} + \frac{7}{5}$

(c) $1\frac{9}{4} + \frac{6}{5}$

(e) $15\frac{4}{3} + 4\frac{4}{4}$

(g) $13\frac{1}{1} + 5\frac{9}{8}$

(i) $8\frac{14}{9} + 11\frac{2}{20}$

(b) $\frac{5}{4} + \frac{8}{7}$

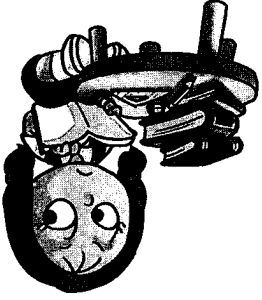
(d) $\frac{8}{5} + 1\frac{4}{7}$


(f) $11\frac{8}{5} + 3\frac{6}{5}$

(h) $3\frac{7}{5} + 12\frac{5}{8}$

(j) $15\frac{5}{12} + 12\frac{7}{10}$

Date:



2. Subtract using a calculator. 

(a) $\frac{5}{4} - \frac{1}{6}$

(b) $\frac{9}{8} - \frac{2}{7}$

(c) $3\frac{1}{7} - \frac{1}{8}$

(d) $2\frac{1}{3} - \frac{11}{5}$

(e) $8\frac{3}{2} - 6\frac{5}{5}$

(f) $7\frac{5}{4} - 1\frac{1}{5}$

(g) $15\frac{9}{5} - 11\frac{7}{6}$

(h) $14\frac{9}{4} - 8\frac{13}{7}$

(i) $16\frac{5}{12} - 3\frac{7}{10}$

(j) $9\frac{7}{3} - 6\frac{10}{3}$

$$(c) \frac{8}{5} + \frac{1}{6}$$

$$(d) \frac{6}{7} + \frac{6}{5}$$



$$(a) \frac{3}{5} + \frac{1}{3}$$

$$(b) \frac{4}{7} + \frac{4}{5}$$

1. Do the following without using a calculator and write the answer in its simplest form.

Practice 4

Date:



$$(g) \quad \frac{10}{9} - \frac{6}{5}$$

$$(h) \quad \frac{6}{5} - \frac{8}{3}$$



$$(e) \quad \frac{8}{7} - \frac{3}{2}$$

$$(f) \quad \frac{7}{6} - \frac{4}{3}$$



2. Do the following using a calculator.

(a) $\frac{5}{12} + \frac{7}{9}$

(b) $\frac{11}{7} + \frac{5}{9}$

(c) $1\frac{4}{3} + \frac{9}{7}$

(d) $\frac{7}{6} + 3\frac{12}{7}$

(e) $9\frac{6}{5} + 5\frac{7}{4}$

(f) $4\frac{20}{7} + 3\frac{7}{5}$

(g) $6\frac{7}{4} + 15\frac{11}{8}$

(h) $14\frac{15}{8} + 23\frac{8}{5}$

(i) $13\frac{9}{7} + 15\frac{11}{15}$

(j) $12\frac{9}{5} + 7\frac{16}{9}$

$$(s) \quad 37\frac{14}{9} - 14\frac{11}{15}$$

$$(q) \quad 24\frac{7}{11} - 15\frac{8}{7}$$

$$(o) \quad 15\frac{6}{1} - 4\frac{7}{5}$$

$$(m) \quad 4\frac{2}{12} - \frac{13}{13}$$

$$(k) \quad \frac{13}{11} - \frac{7}{3}$$

$$(t) \quad 31\frac{12}{7} - 15\frac{8}{15}$$

$$(r) \quad 45\frac{9}{5} - 13\frac{13}{15}$$

$$(p) \quad 13\frac{13}{5} - 1\frac{7}{8}$$

$$(n) \quad 3\frac{1}{15} - \frac{6}{5}$$

$$(l) \quad \frac{15}{11} - \frac{6}{1}$$



Fractions (II)

5

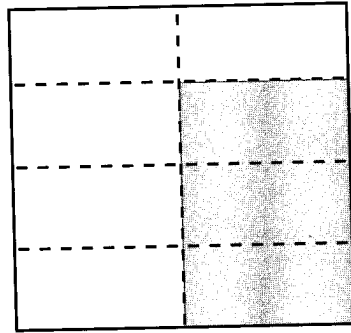
WORKSHEET 16

Date:

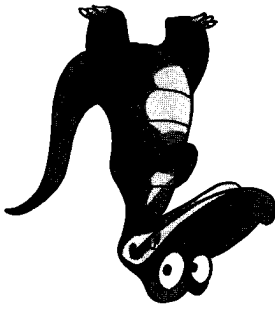
Multiplication of Proper Fractions

1. Show by colouring the area which represents the product of 2 fractions. Write down the product in its simplest form.

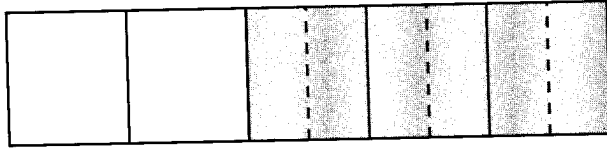
(a) $\frac{3}{2} \times \frac{3}{8}$



(b) $\frac{3}{2} \times \frac{4}{3}$



(c) $\frac{2}{1} \times \frac{5}{3}$



2. Without using a calculator, find the value of each of the following in its simplest form.

$$(a) \frac{1}{3} \times \frac{1}{6}$$

$$(b) \frac{1}{10} \times \frac{7}{1}$$

$$(c) \frac{8}{1} \times \frac{3}{1}$$

$$(d) \frac{1}{7} \times \frac{11}{1}$$

$$(e) \frac{8}{7} \times \frac{4}{5}$$

$$(f) \frac{4}{3} \times \frac{5}{6}$$

$$(k) \frac{9}{4} \times \frac{4}{3}$$

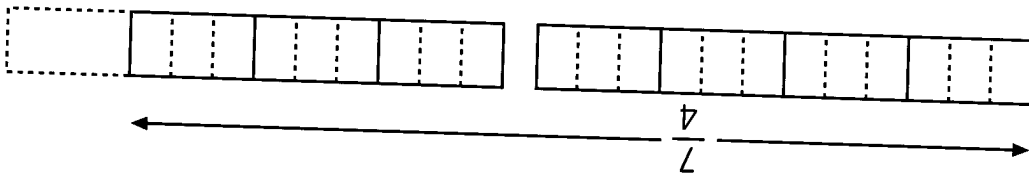
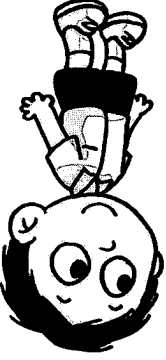
$$(l) \frac{11}{6} \times \frac{1}{4}$$

$$(i) \frac{6}{5} \times \frac{3}{2}$$

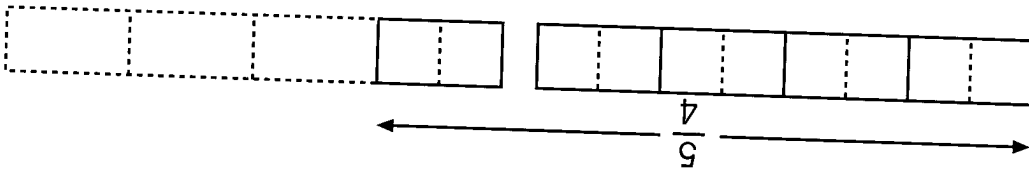
$$(ii) \frac{5}{12} \times \frac{3}{5}$$

$$(g) \frac{7}{5} \times \frac{10}{7}$$

$$(h) \frac{9}{10} \times \frac{5}{12}$$



(b) $\frac{3}{2} \times \frac{7}{4}$



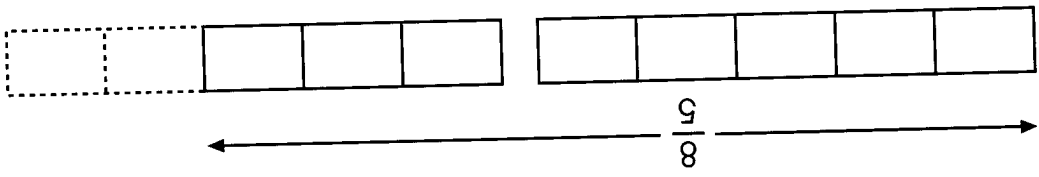
(a) $\frac{1}{2} \times \frac{5}{4}$

1. Do the following multiplications without using a calculator. Shade the product and write the answer in its simplest form.

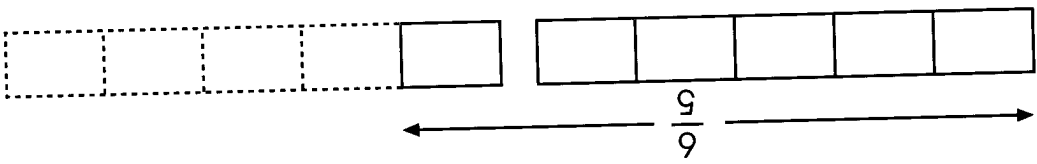
Multiplication of Improper Fractions.

WORKSHEET 17

Date:



$$(d) \quad \frac{4}{3} \times \frac{5}{8}$$



$$(c) \quad \frac{1}{3} \times \frac{5}{6}$$

$$(a) \frac{13}{8} \times \frac{7}{6}$$

$$(b) \frac{35}{14} \times \frac{5}{13}$$

$$(c) \frac{7}{25} \times \frac{14}{5}$$

$$(d) \frac{11}{15} \times \frac{8}{25}$$

$$(e) \frac{18}{5} \times \frac{7}{20}$$

$$(f) \frac{10}{17} \times \frac{5}{32}$$

$$(g) \frac{17}{6} \times \frac{31}{22}$$

$$(h) \frac{9}{16} \times \frac{13}{14}$$



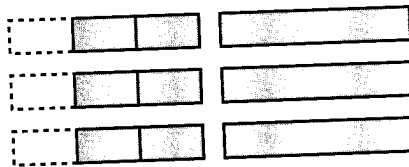
2. Do the following multiplications using a calculator.

WORKSHEET 18

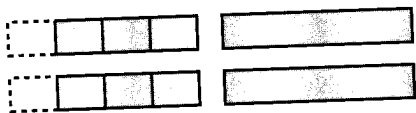
Multiplication of a Mixed Number and a Whole Number

1. Do the following multiplications without using a calculator.

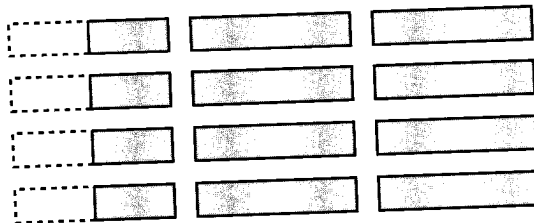
(a) $1\frac{2}{3} \times 3$



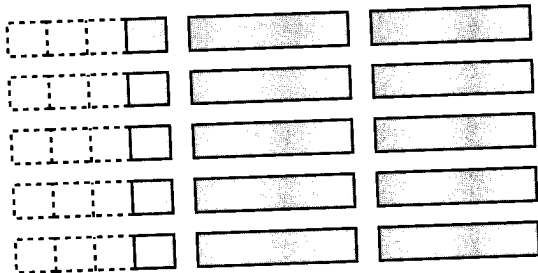
(b) $1\frac{4}{4} \times 2$

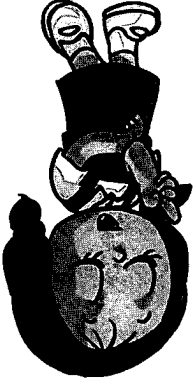


(c) $2\frac{1}{2} \times 4$



(d) $2\frac{1}{4} \times 5$





(a) $3\frac{8}{8} \times 12$

(b) $8\frac{7}{3} \times 10$

(c) $5\frac{5}{5} \times 15$

(d) $7\frac{9}{7} \times 26$

(e) $8\frac{14}{5} \times 18$

(f) $6\frac{10}{7} \times 18$

(g) $9\frac{11}{15} \times 21$

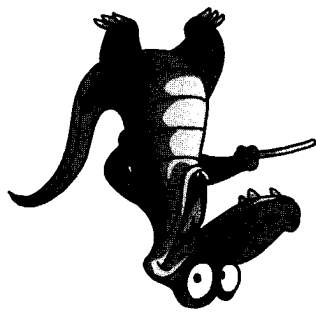
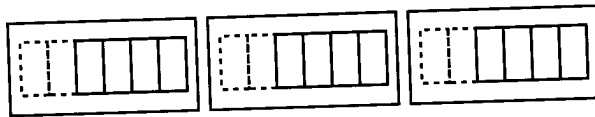
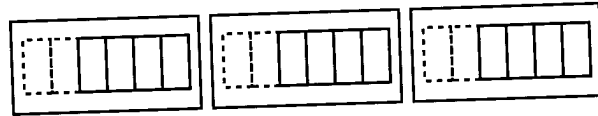
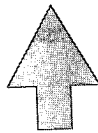
(h) $10\frac{11}{5} \times 14$

2. Do the following multiplications using a calculator. 

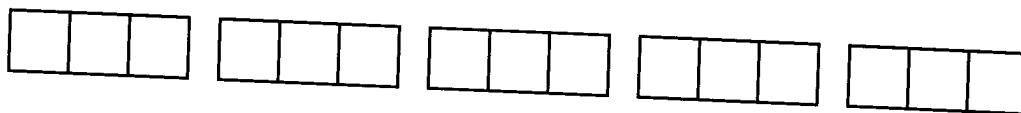
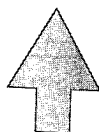
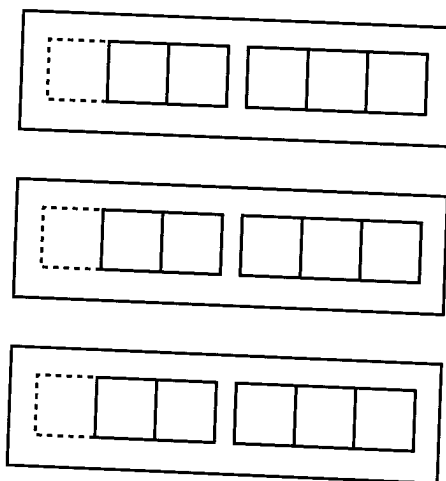
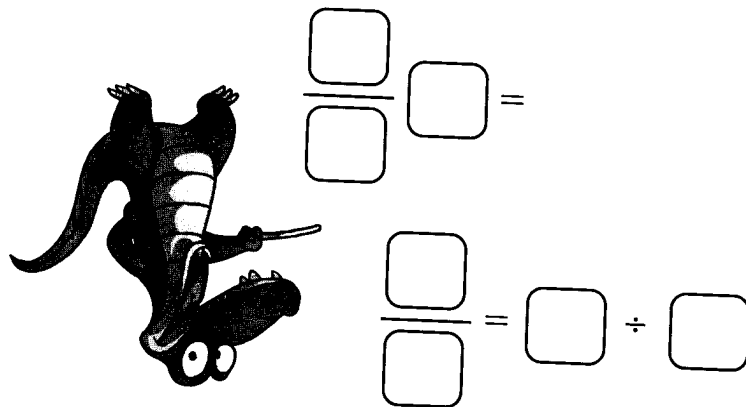
WORKSHEET 19

Fraction as Division

1. (a) 6 children shared 4 chocolate bars. What fraction of a chocolate bar did each child get?



$$\frac{\square}{\square} = 4 \div 6$$



(b) 5 cake rolls were put into 3 plates equally. What fraction of the cake rolls was in a plate?

2. Write each of the following as a fraction in its simplest form.

(a) $3 \div 7$

(b) $5 \div 8$

(c) $6 \div 10$

(d) $7 \div 11$

(e) $4 \div 9$

(f) $10 \div 12$

(g) $14 \div 5$

(h) $18 \div 14$

3. Express each of the following as a decimal.

(a) $\frac{4}{5}$

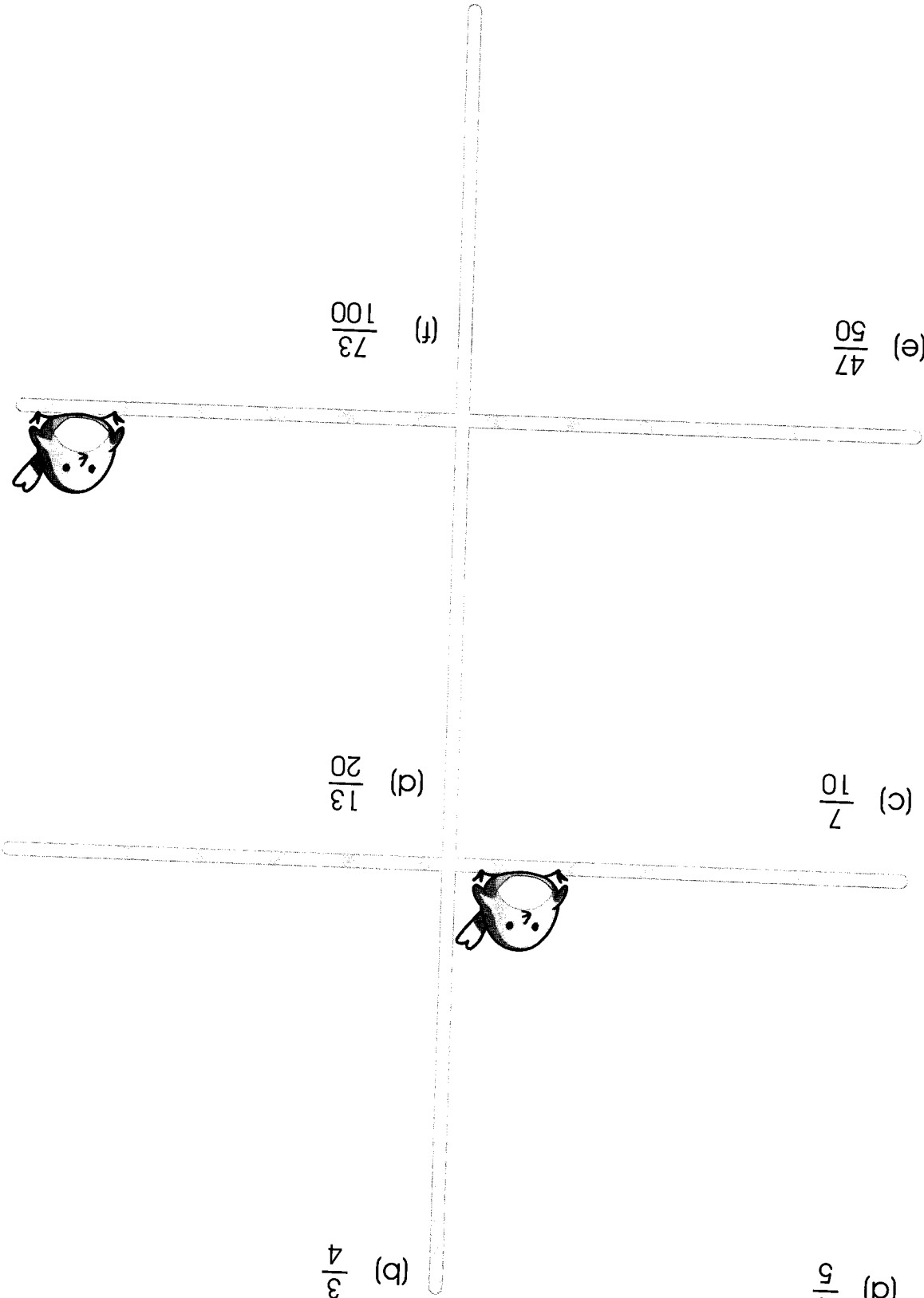
(b) $\frac{4}{3}$

(c) $\frac{7}{10}$

(d) $\frac{13}{20}$

(e) $\frac{47}{50}$

(f) $\frac{73}{100}$



4. Express each of the following as a decimal.

(a) $\frac{5}{8}$

(b) $\frac{2}{5}$

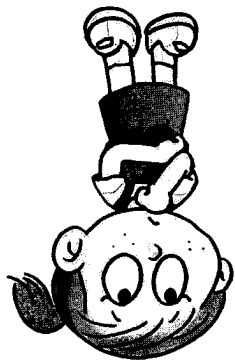
(c) $\frac{4}{11}$

(d) $\frac{67}{20}$

(e) $\frac{63}{50}$

(f) $\frac{237}{100}$





- 5.** Express each of the following as a fraction in its simplest form.

(a) 0.73

(b) 0.82

(c) 0.137

(d) 0.435

(e) 1.28

(f) 1.375

Division of a Fraction by a Whole Number

1. Study the picture and then find the value in each case.

(a) $\frac{1}{5} \div 4 =$ _____ \times _____ $=$ _____

(b) $\frac{3}{4} \div 3 =$ _____ \times _____ $=$ _____

(c) $\frac{3}{2} \div 4 =$ _____ \times _____ $=$ _____

(d) $\frac{7}{4} \div 8 =$ _____ \times _____ $=$ _____

2. Divide the following.

(a) $\frac{1}{3} \div 4$

(b) $\frac{1}{4} \div 2$

(c) $\frac{1}{6} \div 4$

(d) $\frac{1}{7} \div 5$

(e) $\frac{1}{9} \div 10$

(f) $\frac{1}{11} \div 12$



3. Divide the following.

(a) $\frac{3}{2} \div 5$

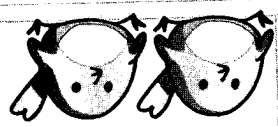
(b) $\frac{3}{4} \div 7$

(c) $\frac{5}{2} \div 3$

(d) $\frac{8}{5} \div 6$

(e) $\frac{7}{10} \div 9$

(f) $\frac{5}{12} \div 8$



(a) $\frac{3}{4} \div 12$

(b) $\frac{5}{7} \div 15$

(c) $\frac{8}{7} \div 21$

(d) $\frac{5}{9} \div 30$

(e) $\frac{10}{9} \div 27$

(f) $\frac{5}{12} \div 45$

4. Divide the following and write each answer in its simplest form.

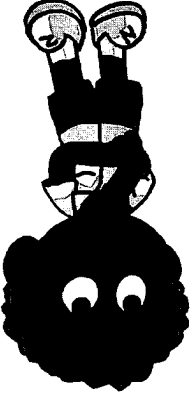
WORKSHEET 21**Word Problems**

1. John had \$150. He spent $\frac{1}{3}$ of his money on a table and the remaining on 5 chairs. How much did one chair cost?

2. A charity organisation collected \$2700 in donations. The organisation gave $\frac{9}{4}$ of the donations to an old folks home and $\frac{2}{3}$ of the remaining donations to an orphanage. How much money was left?


Date:


- 3.** Johnson's mother bought 25 kg of flour. She put the flour equally into 8 small bags. She kept 3 of the bags of flour and gave the rest to her friends. What's the mass of the flour Johnson's mother kept? Write your answer as a mixed number in its simplest form.
- 4.** During one of the durian harvest, Mr Yahaya collected 240 durians from his orchard. He sold $\frac{1}{3}$ of the durians to a supermarket and $\frac{2}{5}$ of the durians to a fruit seller. He packed the remaining durians equally into 4 baskets. Find the number of durians in each basket.

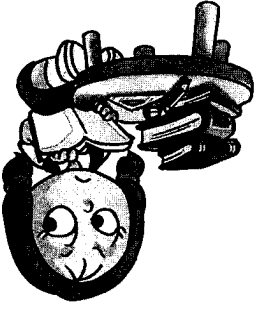


6. Rohani, John and Mary share 78 marbles. Rohani takes $\frac{3}{1}$ of the marbles and John takes thrice as many as Mary. Find the number of marbles John takes.

5. John has 600 stamps. After giving $\frac{4}{1}$ of his collection to Mary, he still has twice as many stamps as Mary has now. How many stamps does Mary have now?

8.  Mr Wong spent $\frac{1}{3}$ of his income on his housing and $\frac{2}{5}$ of his income on his daily expenditures. He saved the rest. Last year, Mr. Wong saved \$24 600. What's the total income of Mr Wong last year?

7.  There were 640 seats in an aeroplane. $\frac{7}{8}$ of the seats were in economy class. On one flight, $\frac{11}{14}$ of the economy class seats were sold. How many economy class seats were not sold?



(e) $\frac{4}{3}$ of 3

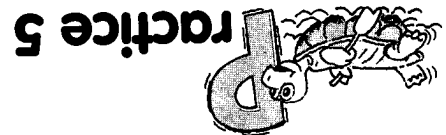
(d) $\frac{1}{3}$ of $\frac{3}{8}$

(c) $\frac{1}{10}$ of $\frac{5}{11}$

(b) $\frac{3}{4}$ of $\frac{1}{6}$

(a) $\frac{3}{2}$ of $\frac{5}{5}$

1. Find the value of each of the following and express each answer in its simplest form.



Practice 5

Date:

2. Fill in the blanks. Write each result as a fraction or a mixed number in its simplest form.

(a) 5 children share 3 pizzas equally.
Each one gets _____ of a pizza.

(b) 8 children share 5 pies equally.
Each one gets _____ of a pie.

(c) 4 kg of rice is divided into 5 bags equally.
Each bag has _____ kg of rice.

(d) A 3 m long string is cut into 7 equal parts.
Each part is _____ m long.

(e) $10 \div 7 =$ _____

(f) $12 \div 9 =$ _____

(c) $\frac{7}{50}$

(a) $\frac{3}{10}$

(d) $\frac{9}{20}$

(b) $\frac{3}{5}$

3. Convert the following fractions into decimals.

(e) $\frac{11}{8} \div 12$

(f) $\frac{10}{7} \div 2$



(c) $\frac{4}{5} \div 10$

(d) $\frac{8}{5} \div 15$

(a) $\frac{1}{3} \div 7$

(b) $\frac{4}{3} \div 9$

4. Calculate the following and express each answer in the simplest form.



5. Calculate the following using a calculator.

(a) $2\frac{1}{10} \times 15$

(b) $1\frac{9}{8} \times 21$

(c) $4\frac{13}{5} \times 18$

(d) $5\frac{8}{7} \times 22$

(e) $\frac{17}{14} \times \frac{6}{5}$

(f) $\frac{42}{25} \times \frac{13}{18}$

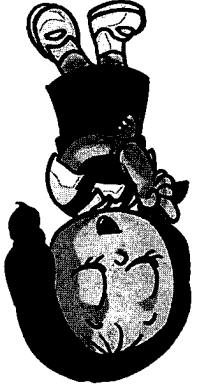
(g) $\frac{11}{17} + \frac{19}{12}$

(h) $\frac{15}{22} + \frac{27}{8}$

6. A box contained apples, oranges and pears. $\frac{3}{5}$ of the fruits were apples and $\frac{1}{4}$ of the remaining fruits were oranges. What fraction of the fruits were pears?
7. Sammy spent $\frac{1}{3}$ of his money on books and the remaining money on 5 identical presents. What fraction of the money did he spend on each of the presents?

8. Mrs Tan had \$45. She spent $\frac{5}{2}$ of the money on a dress and the remaining money on food. How much money did she spend on food?

9. In a class, there are 40 pupils. $\frac{5}{3}$ of them are boys. $\frac{4}{1}$ of the girls wear glasses. How many girls wear glasses in the class?

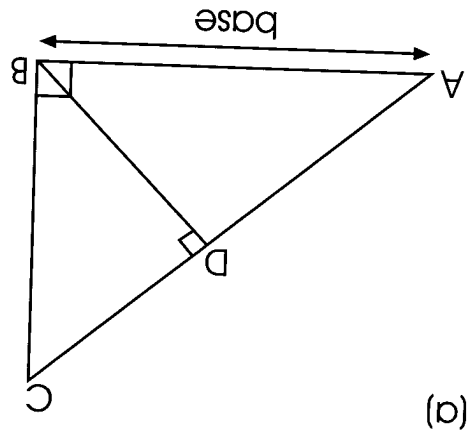


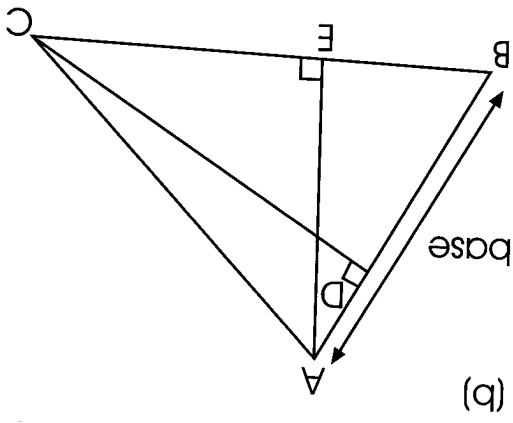
6 Area of a Triangle

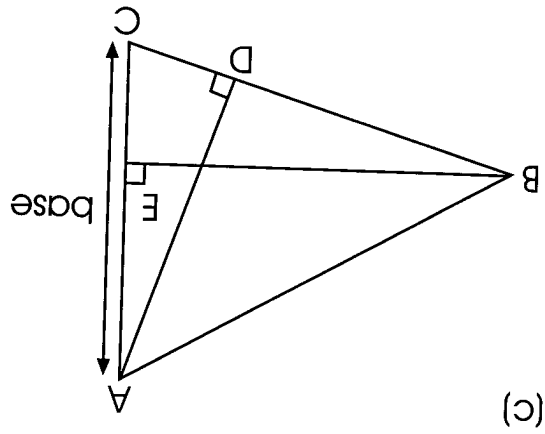
WORKSHEET 22

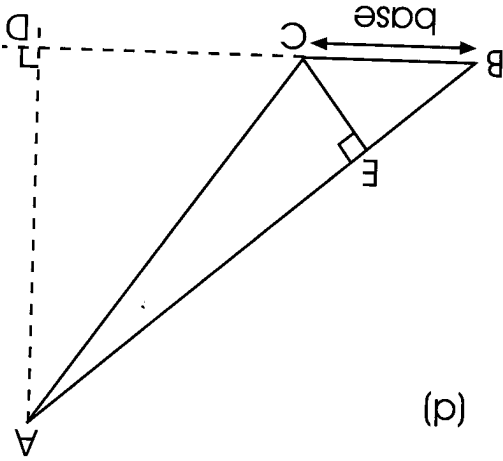
Area of a Triangle

1. Write down the height corresponding to the given base of the triangle.





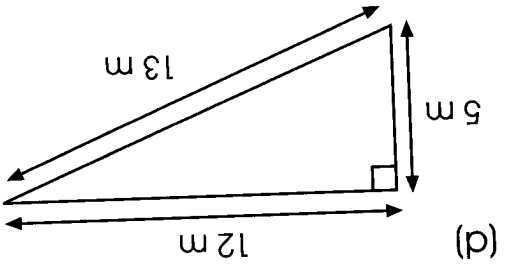
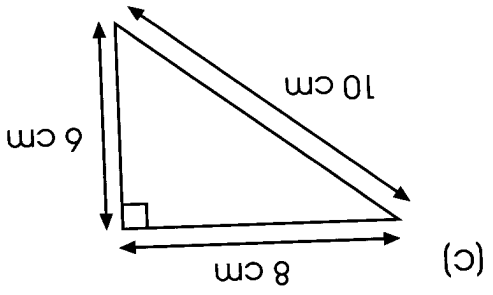
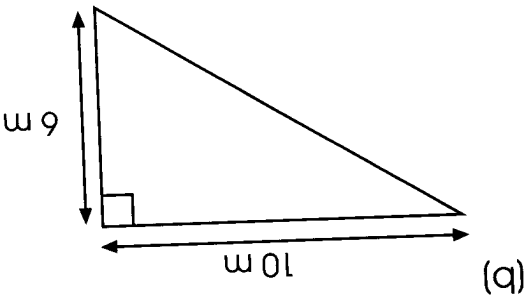
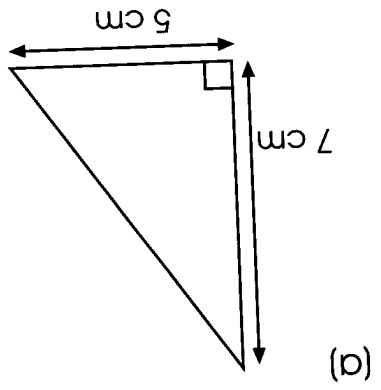




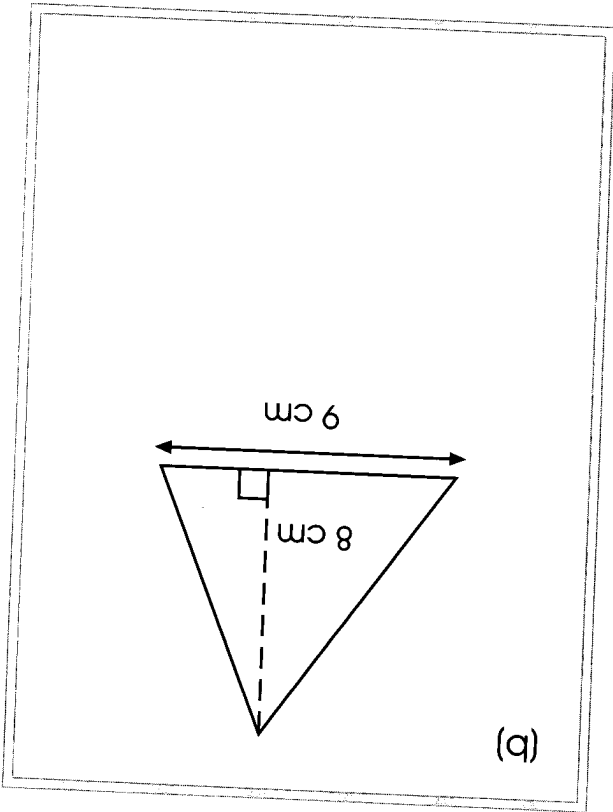
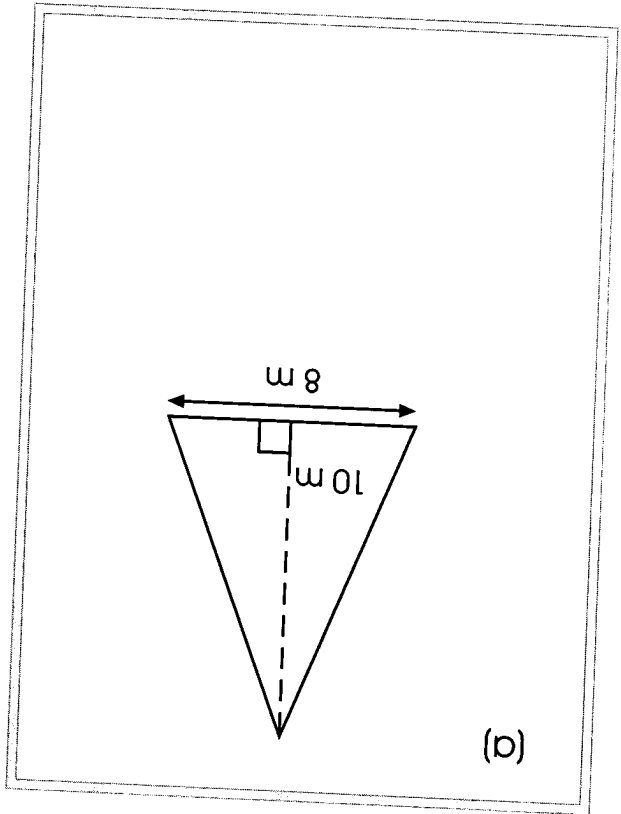
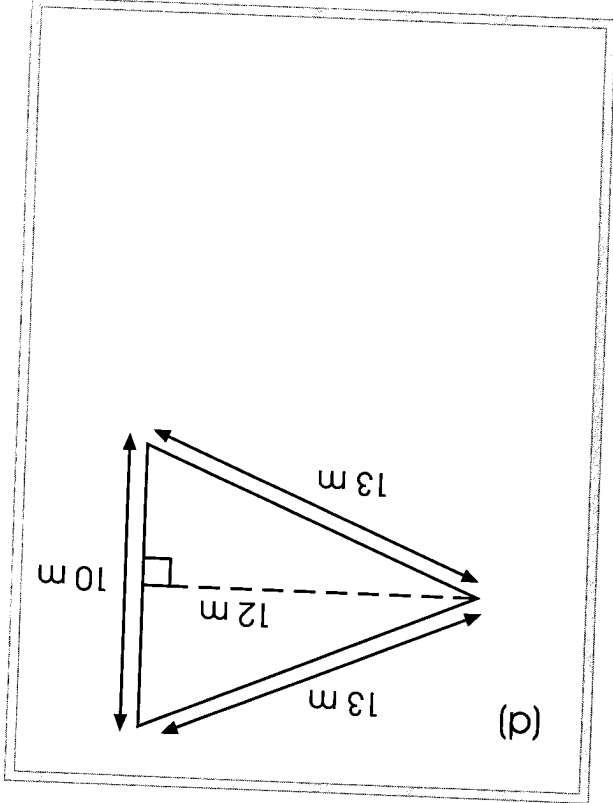
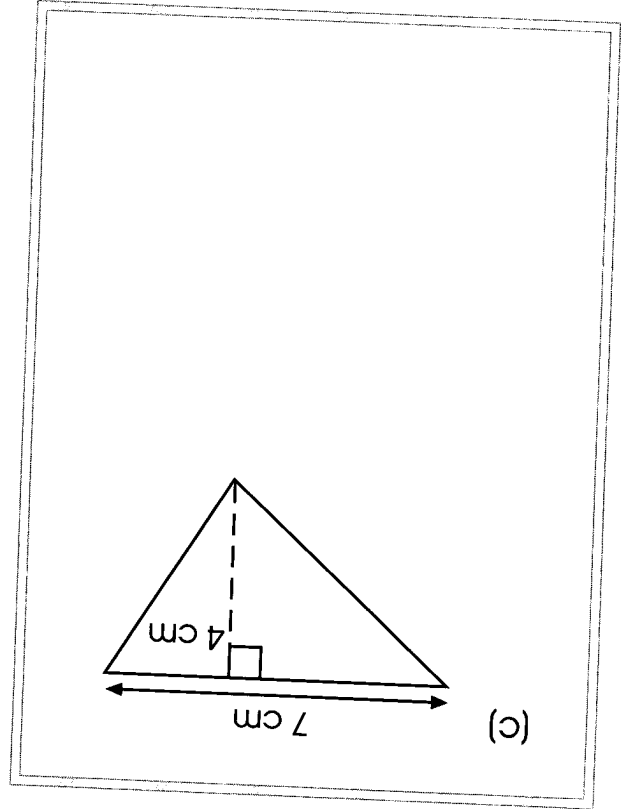
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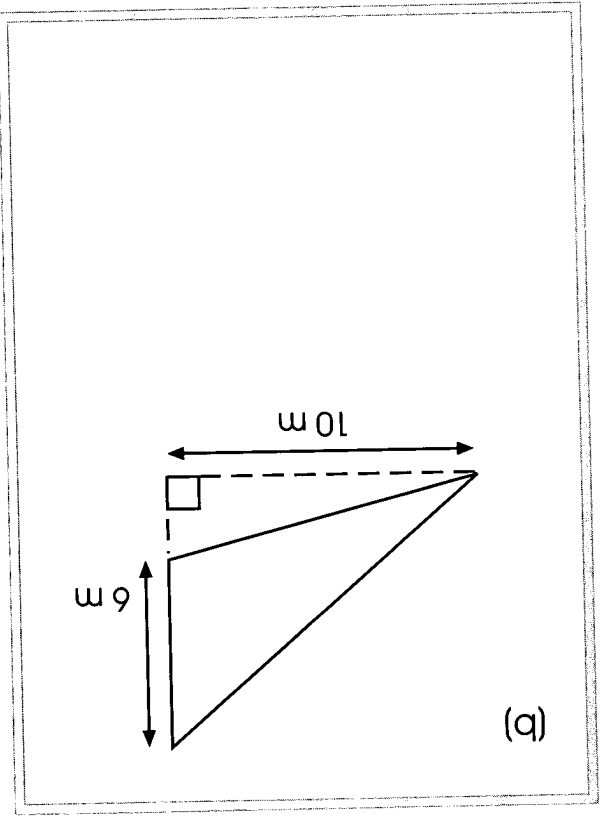
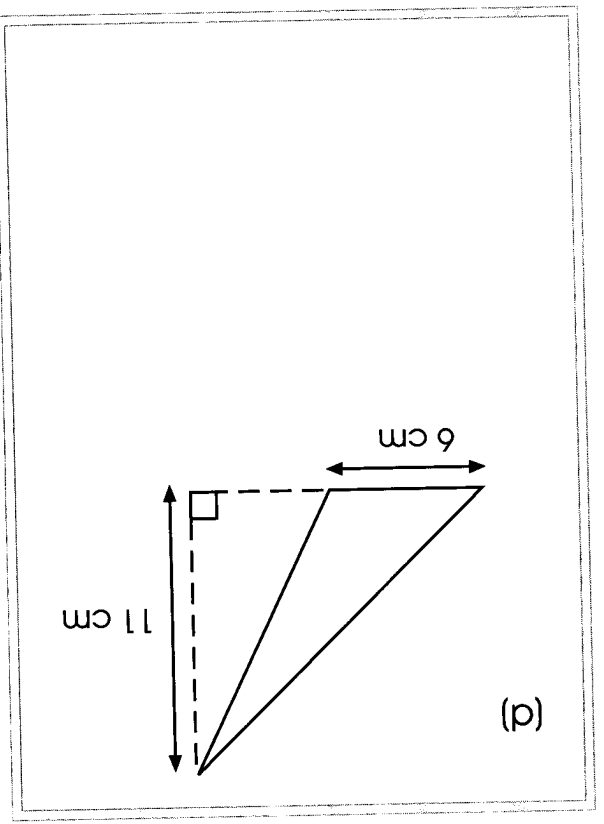
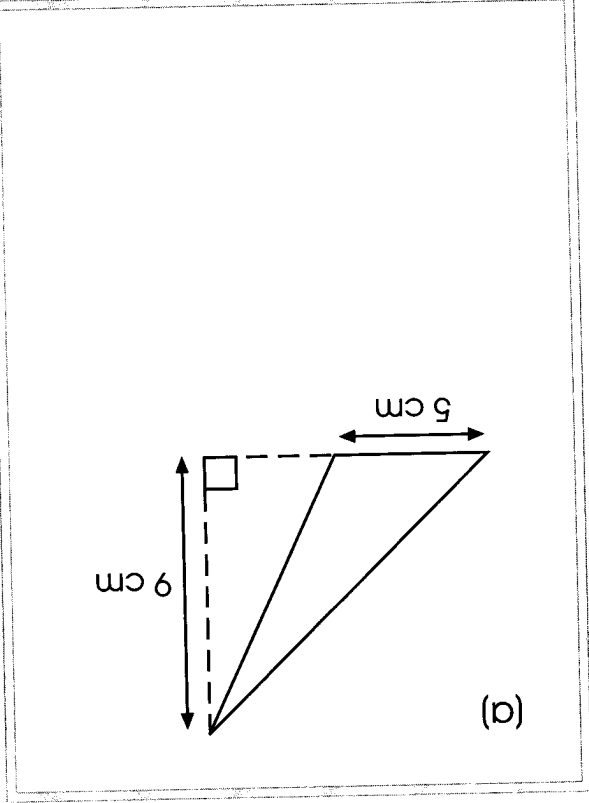
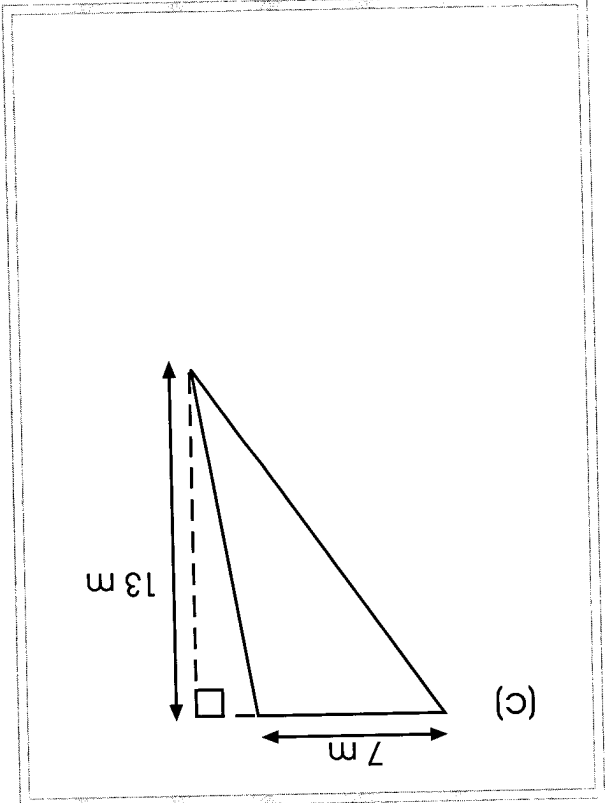
2. Find the area of each triangle.

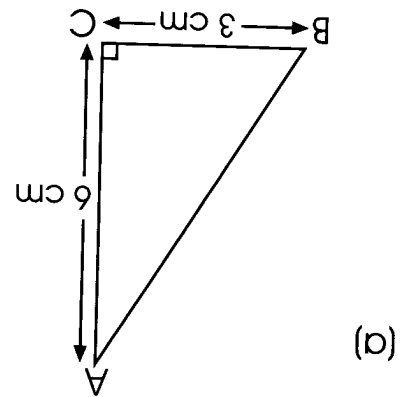
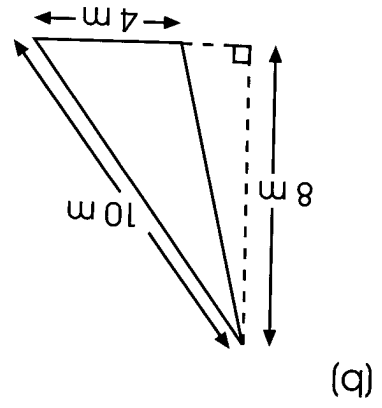
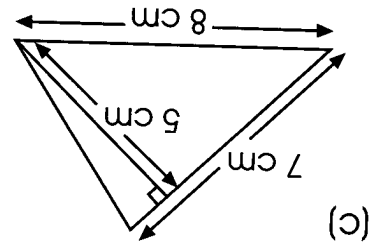


3. Find the area of each triangle.

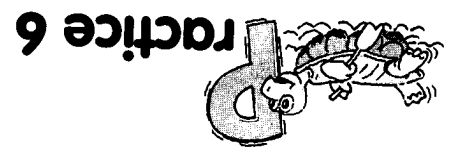


4. Find the area of each triangle.



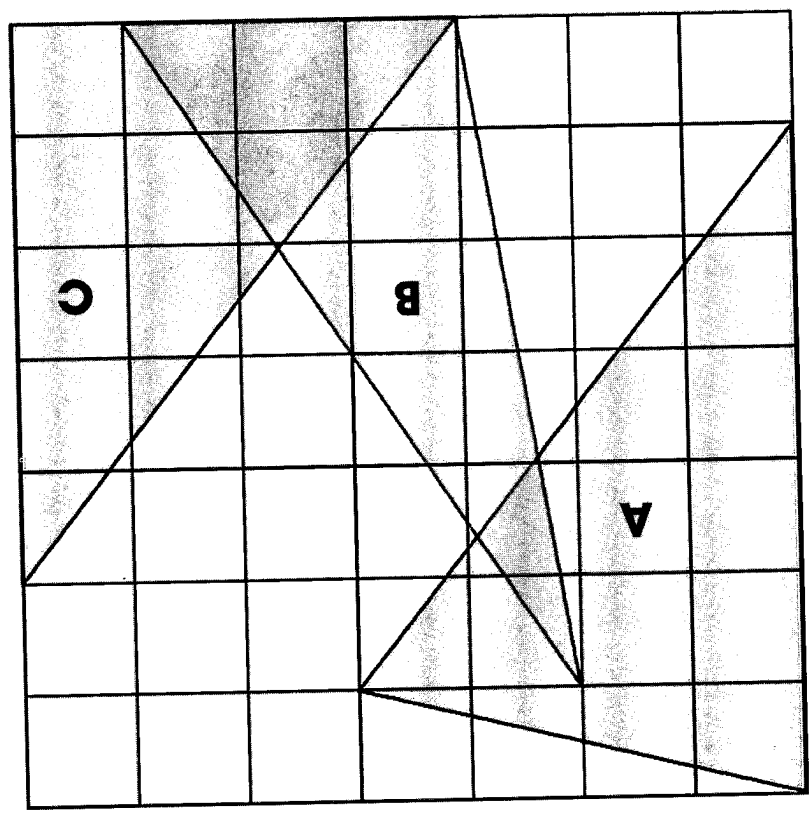


1. Find the area of each triangle.



Date:

2. Which one of the shaded triangles has the greatest area?



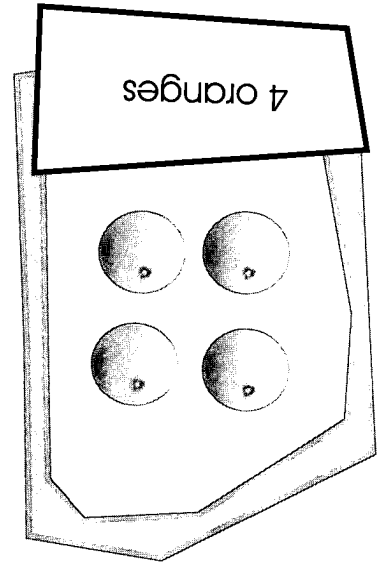
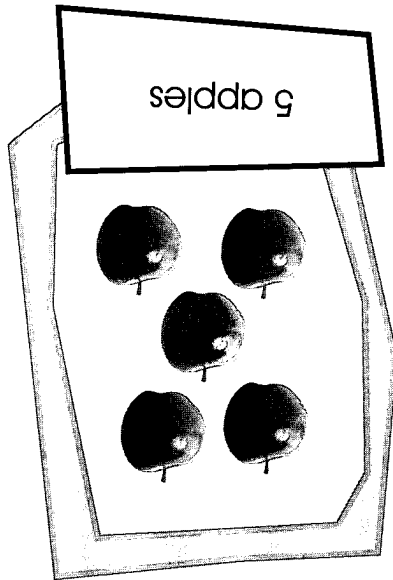
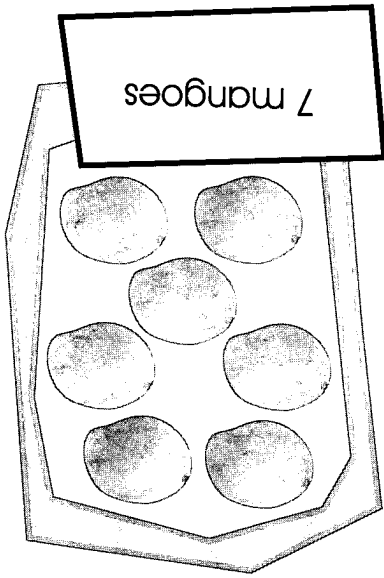
:

(b) The ratio of the number of apples to the number of mangoes is

:

(a) The ratio of the number of oranges to the number of apples is

Fill in the boxes with the correct answers.



1. The picture below shows 3 groups of fruits.

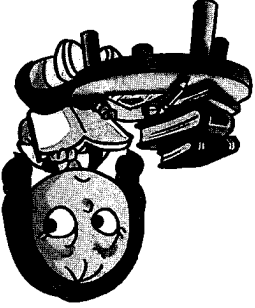
Ratio

WORKSHEET 23

7 Ratio



Date:



(c) The ratio of the number of oranges to the number of mangoes is

 :

(d) The ratio of the total number of oranges and apples to the number

 of mangoes is :

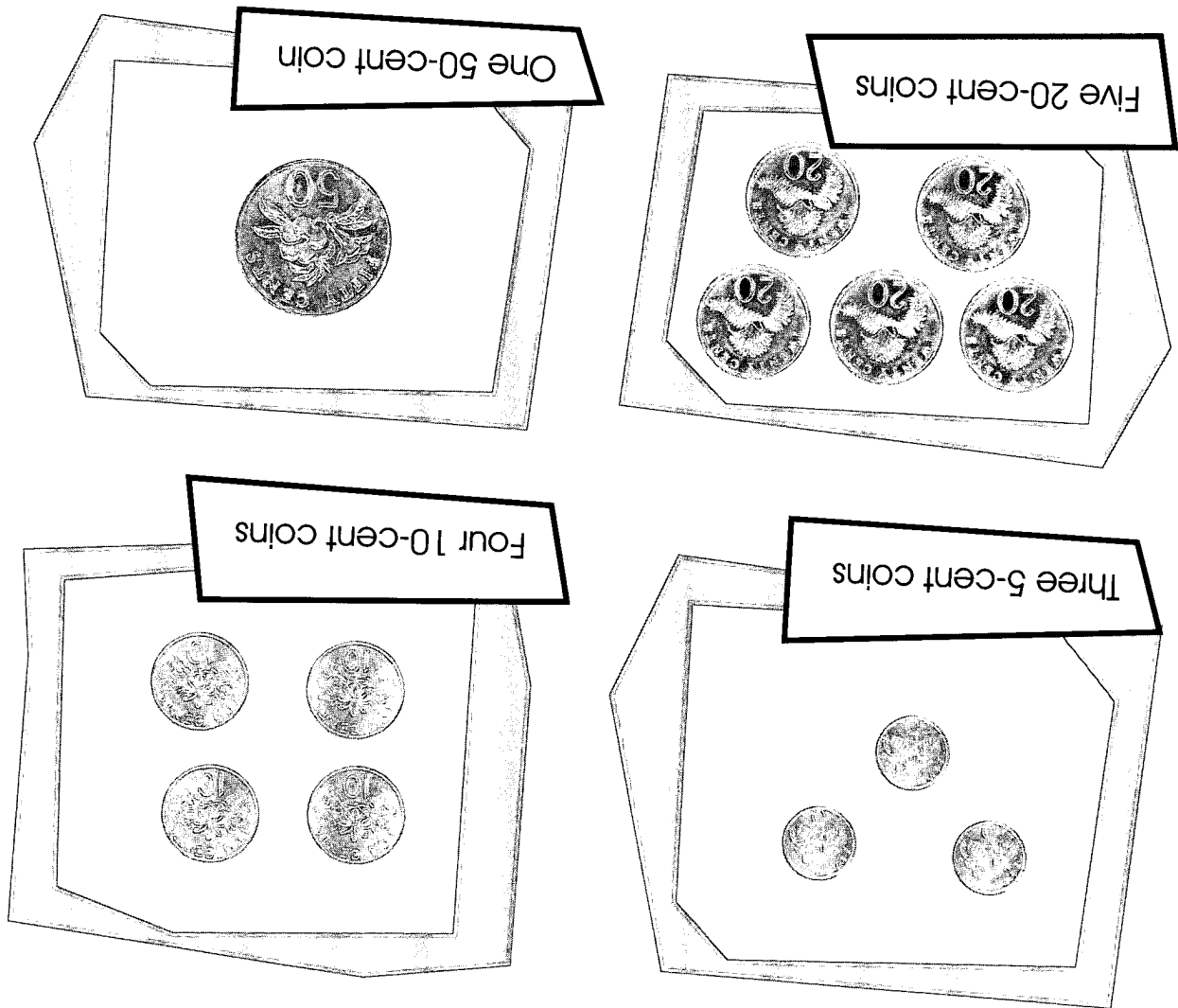
(e) The ratio of the total number of apples and mangoes to the

 number of oranges is :

(f) The ratio of the number of oranges to the number of apples

 to the number of mangoes is : :

2. The picture below shows the number of some types of coins.
- (a) Fill in the boxes with the correct answers.
- The ratio of the number of 5-cent coins to the number of 10-cent coins is :



2. The picture below shows the number of some types of coins.



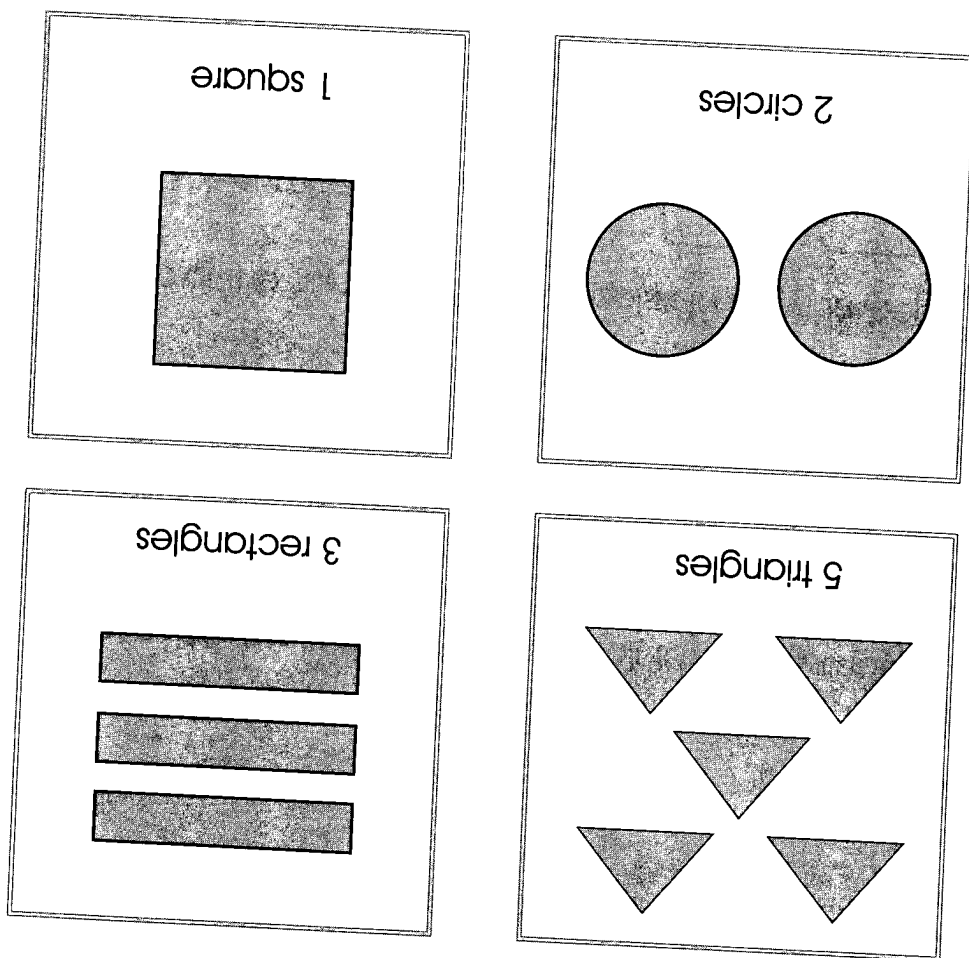
(e) The ratio of the number of 10-cent coins to the number of 20-cent coins to the number of 50-cent coins is : :

(d) The ratio of the number of 5-cent coins to the number of 10-cent coins to the number of 20-cent coins is : :

(c) The ratio of the number of 20-cent coins to the number of 50-cent coins is :

(b) The ratio of the number of 10-cent coins to the number of 20-cent coins is :

3. The picture below shows the number of each type of shapes.



Fill in the boxes with the correct answers.

(a) The ratio of the number of triangles to the number of squares is

 :

(b) The ratio of the number of circles to the number of rectangles is

 :



: : shapes to the number of circles is

(f) The ratio of the number of triangles to the number of 4-sided

: : to the number of squares is

(e) The ratio of the number of rectangles to the number of circles

: 4-sided shapes is

(d) The ratio of the number of 3-sided shapes to the number of

: triangles is

(c) The ratio of the number of rectangles to the number of

(e) $120 : 80 : 60 = \square : \square : \square$

(d) $44 : 36 : 40 = \square : \square : \square$

(c) $10 : 25 : 5 = \square : \square : \square$

(b) $9 : 3 : 12 = \square : \square : \square$

(a) $4 : 12 : 12 = \square : \square : \square$

2. Reduce each ratio to its simplest form.

(e) $55 : 40 = \square : \square$

(c) $9 : 21 = \square : \square$

(a) $4 : 36 = \square : \square$

(f) $100 : 200 = \square : \square$

(d) $24 : 20 = \square : \square$

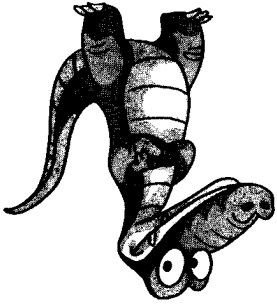
(b) $15 : 24 = \square : \square$

1. Reduce each ratio to its simplest form.

Equivalent Ratios

WORKSHEET 24

Date:



(f) $4:2:3 = 12:\square:9$

(e) $14:7:21 = \square:1:3$

(d) $25:10:15 = 5:\square:3$

(c) $8:10:4 = 24:30:\square$

(b) $5:6:3 = \square:12:6$

(a) $3:1:2 = 12:\square:8$

4. Find the missing numbers in these equivalent ratios.

(e) $\square:4 = 28:16$

(f) $\square:8 = 5:2$

(c) $49:42 = 7:\square$

(d) $2:\square = 6:27$

(a) $2:3 = \square:18$

(b) $4:5 = 32:\square$

3. Find the missing numbers in these equivalent ratios.

(c) the length of Stick A to Stick B to Stick C.

(b) the length of Stick B to Stick C,

(a) the length of Stick A to Stick B,

Find the ratio in its simplest form of

Stick A	18 cm
Stick B	45 cm
Stick C	24 cm

5. The lengths of 3 sticks are shown in the table.

6. A fruit-juice seller used 18 oranges and 10 starfruits to make a jug of fruit juice. Find the ratio of the number of oranges to the number of starfruits used. Express your answer in its simplest form.

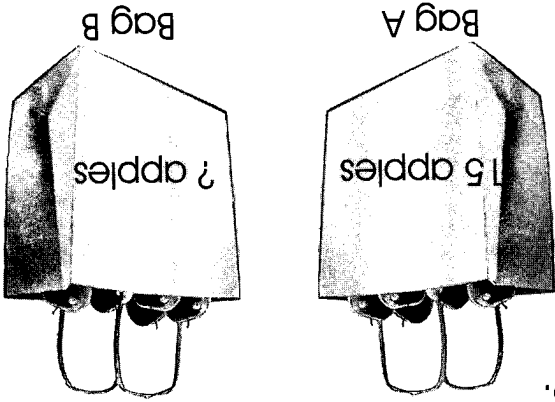
7. The table below shows the savings of Rosy for 3 months. Find the ratio of Rosy's savings in April to her savings in May to her savings in June. Express your answer in its simplest form.

April	May	\$20
June		\$32
		\$18

8. There are 75 books on a bookshelf. 36 of the books are fiction and the rest are non-fiction. Find the ratio of the number of fiction books to the number of non-fiction books. Express your answer in its simplest form.

9. A hawker bought 50 cabbages and 30 carrots. Find the ratio of the number of cabbages to the total number of vegetables bought. Express your answer in its simplest form.

1. Bag A contains 15 apples. The ratio of the number of apples in Bag A to the number of apples in Bag B is 3 : 2. Find the number of apples in Bag B.

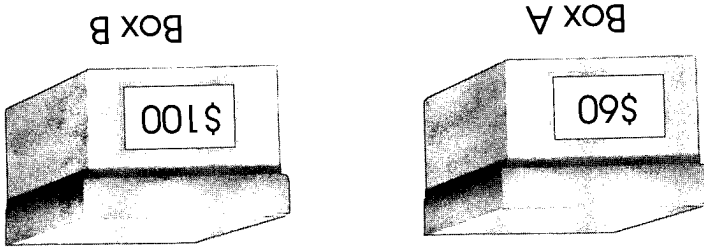


2. The ratio of the number of lions to the number of tigers in a zoo is 1 : 2. There are 14 tigers. What is the number of lions in the zoo?

- 3.** Sammy has some catfish and carps. The ratio of the number of catfish to the number of carps is $2 : 3$. He has 21 carps. How many catfish does he have?
- 4.** In a school's annual sports day, the ratio of the number of boys to the number of girls participating in the track events is $5 : 3$. There are 60 boys participating in these events. Find the number of girls participating in the track events.

6. The ratio of the number of oranges to the number of apples that a fruit seller has is 3 : 4. He has 32 apples. Find the number of oranges that he has.

If now Box A has \$90, how much money must be put into Box B to maintain the same ratio?



5. Money is kept in 2 boxes as shown below. Find the ratio of the amount of money in Box A to the amount of money in Box B. Express your answer in its simplest form.



(b) $18 : 30 : 24$

(a) $50 : 75$

2. Reduce each ratio to the simplest form.

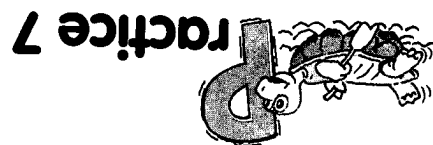
(d) $32 : 16 : 40 = 4 : \square : \square$

(c) $2 : 6 : 4 = \square : 18 : \square$

(b) $4 : \square = 12 : 15$

(a) $3 : 5 = \square : 20$

1. Fill in the blanks.



Date:

- 3.** Han's school bag weighs 5 kg. Hamid's school bag is 1 kg lighter. What is the ratio of the mass of Hamid's school bag to Han's school bag?
- 4.** The width of a door is 80 cm. The height of the same door is 170 cm longer than the width. What is the ratio of the height of the door to its width? Express your answer in its simplest form.

- 5.** The ratio of the number of boys to the number of girls in a class is 5 : 4. There are 15 boys. How many girls are there in the class?
- 6.** John, David and Bala have 80 stamps altogether. John has 12 stamps and David has 52 stamps. What is the ratio of the number of stamps John has to the number of stamps David has to the number of stamps Bala has?

<input type="text"/>	(a) $\frac{5}{2}$
<input type="text"/>	(b) $\frac{8}{6}$
<input type="text"/>	(c) $\frac{17}{25}$
<input type="text"/>	(d) $\frac{33}{50}$
<input type="text"/>	(e) $\frac{8}{35}$
<input type="text"/>	(f) $\frac{4}{23}$

1. Express each of the following as a decimal.

Date:



<p>(c) $\frac{3}{5} + \frac{4}{3}$</p>	<p>(d) $\frac{1}{6} + \frac{4}{5}$</p>
<p>(a) $\frac{4}{3} + \frac{1}{3}$</p>	<p>(b) $\frac{3}{2} + \frac{1}{2}$</p>

2. Add the following and write each answer in its simplest form.

3. Subtract the following and write each answer in its simplest form.

$$(a) \frac{4}{5} - \frac{1}{2}$$

$$(b) \frac{7}{12} - \frac{1}{3}$$

$$(c) \frac{6}{5} - \frac{4}{3}$$

$$(d) \frac{3}{2} - \frac{5}{5}$$



$$(a) \frac{5}{3} \times \frac{6}{5}$$

$$(b) \frac{11}{12} \times \frac{3}{11}$$

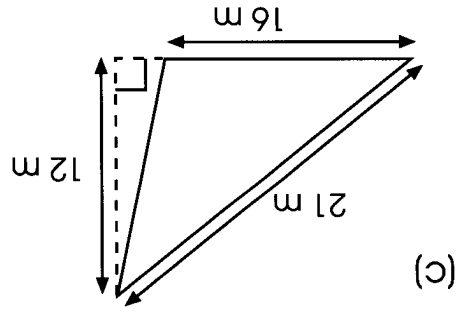
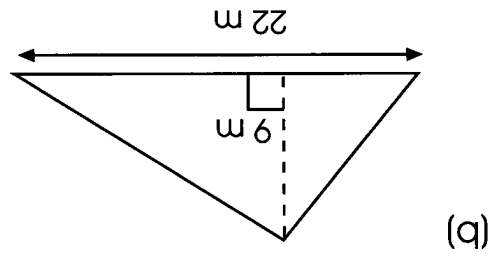
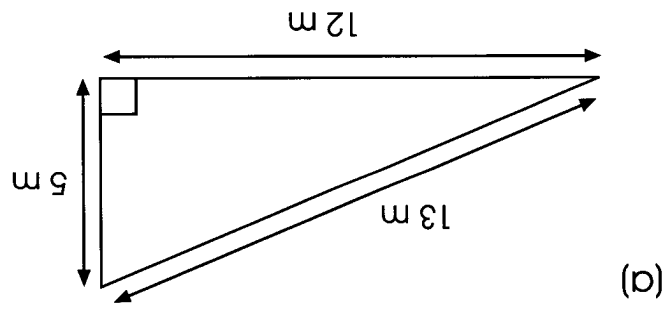
$$(c) \frac{6}{12} \times \frac{7}{13}$$

$$(d) \frac{9}{2} \times \frac{7}{20}$$

$$(e) \frac{3}{10} \times \frac{7}{15}$$

$$(f) \frac{5}{14} \times \frac{20}{7}$$

4. Multiply the following and write each answer in its simplest form.



5. Find the area of each triangle.

6. Write each ratio in its simplest form.

$$\boxed{} : \boxed{} = 8 : 14 \quad (\text{a})$$

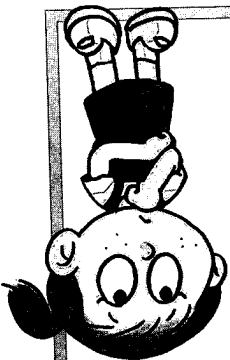
$$\boxed{} : \boxed{} = 36 : 27 \quad (\text{b})$$

$$\boxed{} : \boxed{} = 28 : 36 \quad (\text{c})$$

$$\boxed{} : \boxed{} : \boxed{} = 40 : 32 : 64 \quad (\text{d})$$

$$\boxed{} : \boxed{} : \boxed{} = 27 : 15 : 42 \quad (\text{e})$$

$$\boxed{} : \boxed{} : \boxed{} = 55 : 65 : 115 \quad (\text{f})$$



(c) $\frac{8}{7} \div 21$	
(d) $\frac{9}{5} \div 30$	
(a) $\frac{3}{4} \div 12$	
(b) $\frac{7}{5} \div 15$	

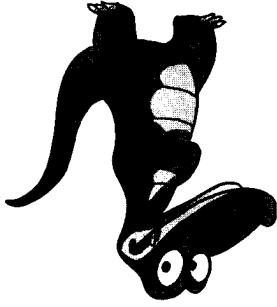
7. Divide the following and write each answer in its simplest form.

- 8.** Mrs Khoo carries a basket with 3 kg of fish and $\frac{1}{2}$ kg of vegetables. The mass of the basket is $\frac{1}{12}$ kg. What is the total mass that Mrs Khoo carries?

- 9.** $\frac{5}{9}$ of the fish in the tank are guppies. Half of the remainder are goldfish. What fraction of the fish are goldfish?

10. In a class of 33 pupils, $\frac{11}{3}$ of them wear glasses. $\frac{1}{3}$ of the pupils who wear glasses are girls. How many boys wear glasses?

11. John has 12 pencils, 10 erasers and 8 pens. What is the ratio of the number of erasers to the total number of pens and pencils? Give your answer in its simplest form.



- 13.** George and Nick each has some stamps. The number of George's stamps to Nick's stamps is in the ratio 5 : 3. George has 75 stamps.
- (a) How many stamps does Nick have?
(b) How many stamps do they have altogether?

- 12.** David has \$70, Sean has \$35 and Ken has \$35 more than David. What is the ratio of the amount that David has to the amount that Sean has to the amount that Ken has?

- 14.** The ratio of the number of sheep to the number of cows in a farm is 5:8. There are 15 sheep in the farm.
- (a) How many cows are there in the farm?
(b) How many sheep and cows are there altogether in the farm?

- 15.** Jane, Peter and Mary each has some cards in the ratio 3:5:2. Peter has 40 cards. How many fewer cards did Mary have than Peter?

(e) $13\frac{9}{4} + 6\frac{11}{12}$

(f) $6\frac{7}{3} + 15\frac{2}{3}$

(c) $2\frac{12}{5} + 5\frac{3}{2}$

(d) $12\frac{10}{3} + 3\frac{2}{5}$

(a) $3\frac{1}{12} + 4\frac{14}{14}$

(b) $1\frac{9}{2} + 3\frac{1}{13}$



1. Add the following using a calculator.



Date:



$$(e) 15\frac{5}{5} - 11\frac{9}{4}$$

$$(f) 15\frac{3}{3} - 7\frac{7}{8}$$

$$(c) 11\frac{3}{2} - 3\frac{2}{9}$$

$$(d) 31\frac{10}{3} - 5\frac{6}{5}$$

$$(a) 3\frac{13}{2} - \frac{7}{12}$$

$$(b) 12\frac{14}{3} - 3\frac{1}{12}$$



2. Subtract the following using a calculator.



(e) $6 \frac{11}{18} \times 26$

(f) $13 \frac{5}{16} \times 34$

(c) $20 \frac{17}{6} \times 15$

(d) $7 \frac{9}{8} \times 23$

(a) $15 \frac{3}{14} \times 5$

(b) $10 \frac{15}{7} \times 9$



3. Do the following multiplications using a calculator.

$$(e) \frac{3}{98} \times \frac{10}{5}$$

$$(f) \frac{6}{46} \times \frac{13}{7}$$

$$(c) \frac{7}{15} \times \frac{27}{8}$$

$$(d) \frac{43}{33} \times \frac{18}{8}$$

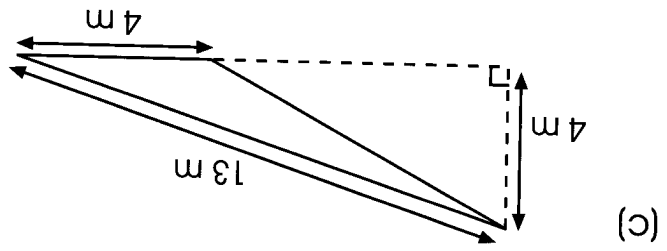
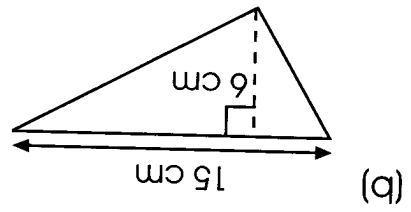
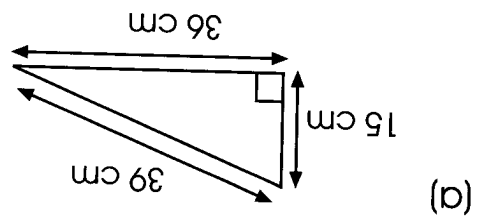
$$(a) \frac{9}{17} \times \frac{3}{11}$$

$$(b) \frac{5}{7} \times \frac{2}{6}$$



4. Do the following multiplications using a calculator.

5. Find the area of each triangle.





(g) : 15 : 20 = 1 : 3 : 4

(f) : 15 : = 4 : 3 : 2

(e) : 10 : 15 : 45 = 2 : 3 :

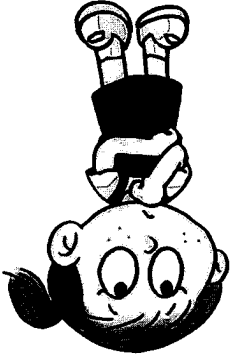
(d) : 25 = 36 : 100

(c) : 3 = 15 : 10

(b) : 5 : 6 = : 24

(a) : 1 : 4 = 5 :

6. Fill in the boxes.



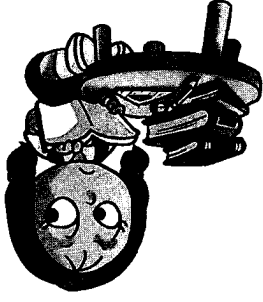
7. Jane has 2 pieces of string of length in the ratio 3 : 7. The length of the longer piece is 42 cm. Find the length of the shorter piece of string.
8. John and Mary each has some money in the ratio 7 : 8. Mary has \$32. How much money do they have altogether?

9. The ratio of the number of boys to the number of girls in a class is 7 : 8. There are 14 boys. How many girls are there in the class?

10. Peter and Jane each has some cards. The ratio of Peter's cards to Jane's cards is 3 : 4. Peter has 15 cards. Find the total number of cards they have.


11. In a class, the ratio of the number of boys to the number of girls is 3 : 4. There are 18 boys. Find the total number of pupils in the class.

12. In a library, the ratio of the number of Chinese books to the number of English books to the number of Malay books is 3 : 7 : 2. There are 318 Malay books in the library.
(a) Find the number of Chinese books in the library.
(b) Find the number of English books in the library.





14. In a class, $\frac{7}{4}$ of the pupils were boys. After 2 boys left, there were equal numbers of girls and boys in the class. How many girls were there in the class?

13. Mrs Lee had \$350. She spent $\frac{5}{1}$ of it on food and $\frac{4}{3}$ of the remainder on an electronic keyboard. How much money did she spend on the keyboard?


-  **16.** Mr Lee's monthly salary is \$2700. Every month, he spends $\frac{3}{1}$ of it on his housing loan, $\frac{4}{1}$ on daily expenses, $\frac{6}{1}$ on his children's education and saves the rest. How much money does Mr Lee save every month?

- 15.** Mrs Tan baked 48 tarts. She gave $\frac{1}{6}$ of them to her neighbour and kept $\frac{2}{1}$ of the remainder for her family. She and her 3 friends shared the rest equally. How many tarts did each of them get?

18.  In a primary school, the ratio of the number of girls to the number of boys is 35 : 32. There are 1088 boys in the school. How many girls are there in the school?

17.  Mrs Chen has $2\frac{1}{2}$ ℓ of milk in a jar. She pours some milk into a bottle. The capacity of the bottle is $\frac{2}{3}$ ℓ. After the bottle is filled fully, the remaining milk in the jar is divided into 5 cups. How much milk is there in each of the cups?

20. In a primary school, the ratio of the number of Chinese pupils to Malay pupils to Indian pupils is 6 : 3 : 2. There are 320 Indian pupils in the school. How many pupils are there altogether in the school?

19.  Mr Tan had 600 eggs. On the first day, he sold $\frac{5}{12}$ of them and on the second day, he sold $\frac{10}{3}$ of the remainder. How many eggs were left after the two days?