

Practice 5 Multiplying Two Proper Fractions

- 1 Find the value. Express the answer in its simplest form where possible.

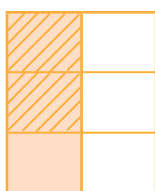
(a)



$$\frac{1}{2} \text{ of } \frac{1}{4} = \frac{1}{2} \times \frac{1}{4}$$

$$=$$

(b)



$$\frac{2}{3} \text{ of } \frac{1}{2} = \frac{2}{3} \times \frac{1}{2}$$

$$=$$

- 2 Multiply. Express each answer in its simplest form where possible.

(a) $\frac{1}{7} \times \frac{3}{4} =$

(b) $\frac{2}{7} \times \frac{1}{2} =$

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

(d) $\frac{9}{10} \times \frac{2}{3} =$

- 3 Aishah had $\frac{5}{8}$ kg of sliced onions. She used $\frac{1}{5}$ of it to cook some curry.
What was the mass of the onions used in kilograms?
- 4 Dave spent $\frac{9}{10}$ of his pocket money and out of this amount, $\frac{1}{3}$ was spent on food. What fraction of his pocket money was spent on food?
- 5 Sally has a box of buttons. $\frac{3}{4}$ of the buttons are red. $\frac{1}{2}$ of the red buttons are round. What fraction of the buttons in the box are red and round?
- 6 $\frac{4}{5}$ of the students in Class 5A are swimmers. $\frac{2}{3}$ of the swimmers are boys.
What fraction of Class 5A students are boys who swim?

Practice 8A **Word Problems**

- 1 Meiling was given \$14 as pocket money for a week.

Each week, she spent $\frac{3}{7}$ of it and saved the rest.

- (a) How much did she spend in a week?
(b) How much did she save in 4 weeks?



6 Miss Mok had \$120.

She spent $\frac{1}{4}$ of her money on a handbag and $\frac{2}{5}$ of the remaining amount on a pair of shoes.

How much did Miss Mok spend on the pair of shoes?



Practice 8B **Word Problems**

- 1 $\frac{5}{12}$ of the pupils in a school are left-handed and the rest are right-handed.
There are 276 more pupils who are right-handed than left-handed.
What is the total number of pupils in the school?



4 Roy had some money at first.

He spent \$120 on a pair of jeans and $\frac{4}{7}$ of the remaining amount on a shirt.

He had $\frac{1}{9}$ of his money left.

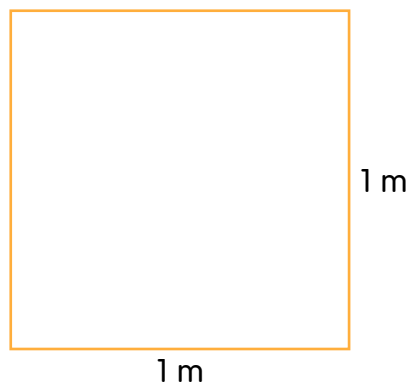
How much did Roy have at first?



Performance Task

Activity: Finding the area of a rectangle through multiplying proper fractions.

The figure below represents a square measuring 1 m by 1 m.

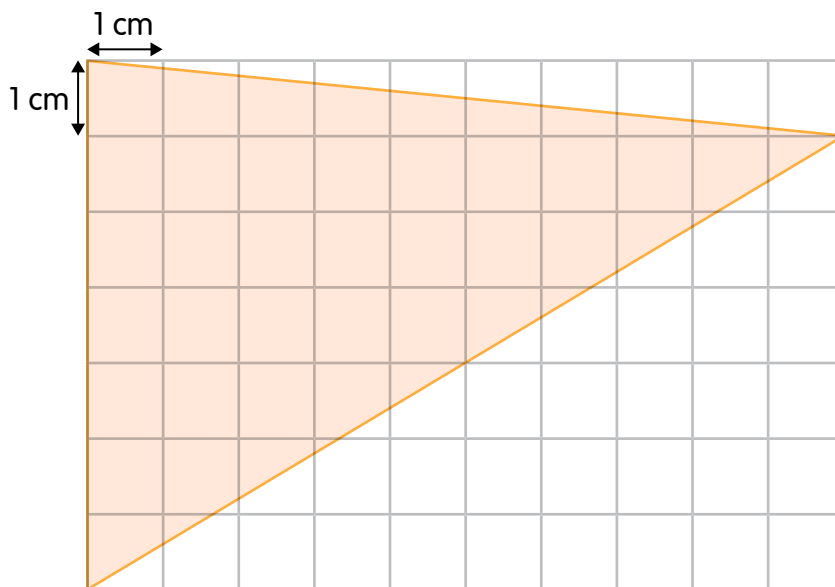


- (a) Mark out $\frac{2}{5}$ m by $\frac{3}{4}$ m. Shade this rectangle and find its area.
- (b) Show how the area of the rectangle obtained in (a) is related to the fraction of the shaded part of the whole figure.

Practice 3 Area of Triangle

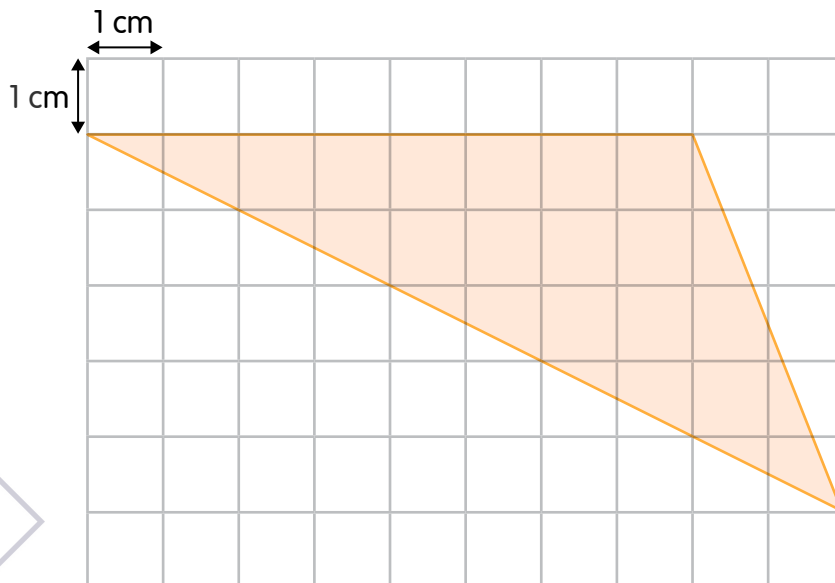
- 1 Find the area of each shaded triangle.

(a)



Area =

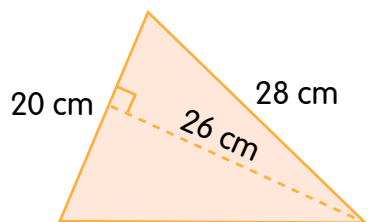
(b)



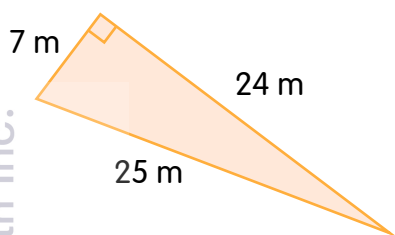
Area =

2 Find the area of each shaded triangle.

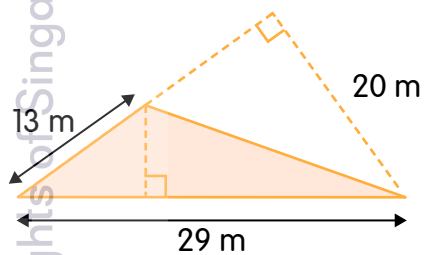
(a)



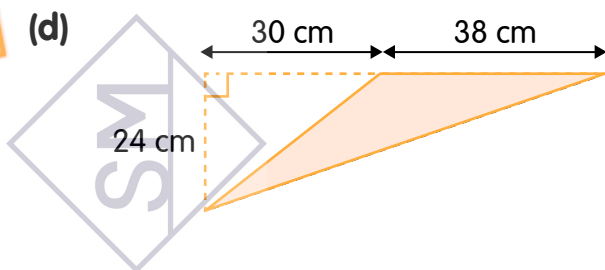
(b)



(c)

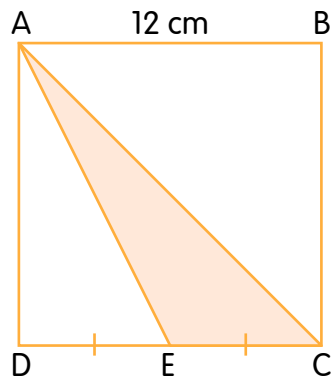


(d)

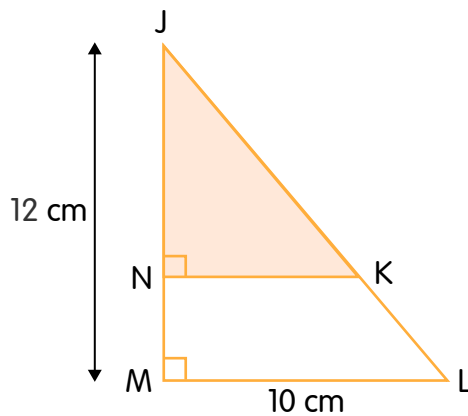


3 Find the area of the shaded triangle in each figure.

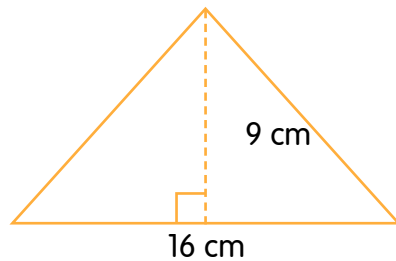
(a) ABCD is a square of side 12 cm and $DE = EC$.



(b) The area of triangle JLM is twice the area of triangle JKN.



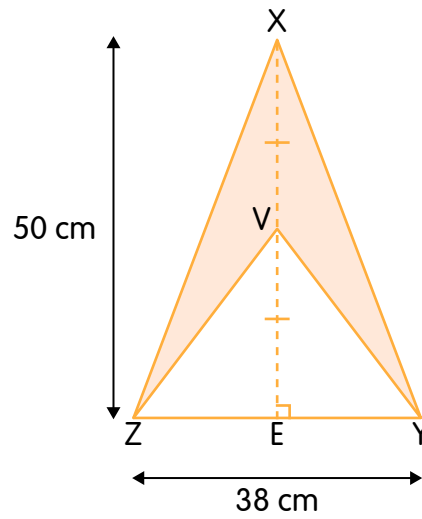
- 4 Triangles X and Y are two different triangles with the same area. The diagram below shows triangle X.



- (a) What is the area of triangle Y?
(b) Give one possible base and height of triangle Y.



- 5 The figure shows two triangles. $XV = VE$.

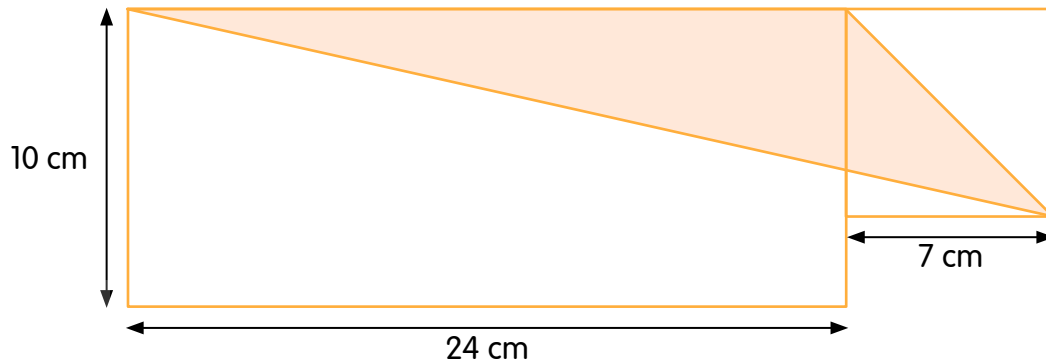


Find the area of the shaded part.



Practice 4B Area of Composite Figures

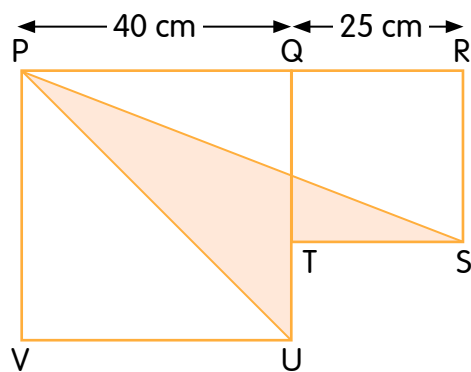
- 1 The figure is made up of a rectangle and a square.
The length of the rectangle is 24 cm and its breadth is 10 cm.
The side of the square is 7 cm.



What is the area of the shaded part?



- 4 PQUV and QRST are squares.
Find the area of the shaded part.



Problem Solving

Figure A is a right-angled triangle with base 6 cm and height 8 cm. Four of these right-angled triangles are arranged and pasted on a piece of paper to form Figure B as shown below.

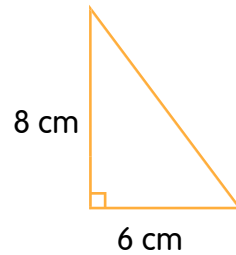


Figure A

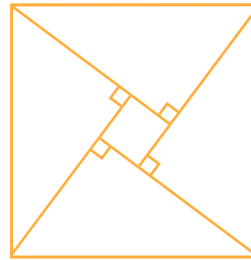


Figure B

What is the length of each side of the big square in Figure B?