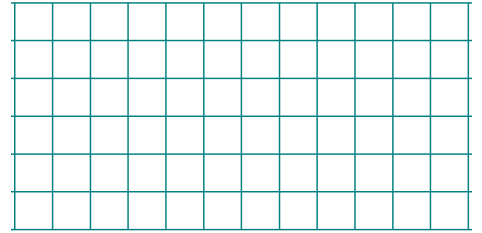


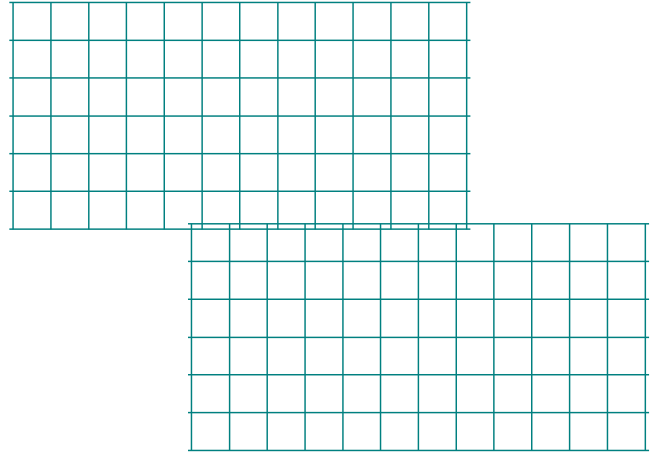
Homework for Lesson № 12

1 Write expressions to solve the word problems. Make any necessary diagrams.

5 identical boxes hold x candies. How many candies are in 9 such boxes?

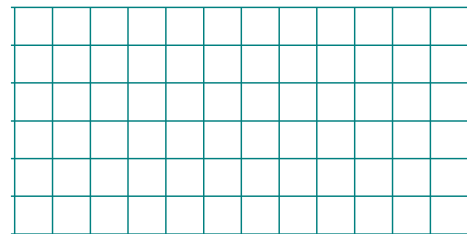


The total for x identical candies is b dollars. Little Joe spent d dollars on these candies. How many did he buy?

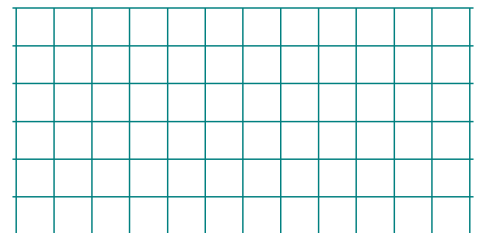


A tape transporter moves 20 meters in 4 seconds. How far does it move in w seconds?

There are x oranges in each bowl on the table. Altogether there are q oranges. How many plates are on the table?



There are x oranges and y apples in each bowl on the table. Altogether there are q fruits. How many bowls are on the table?



2 Divide with or without a remainder:

$$9 \overline{) 85}$$

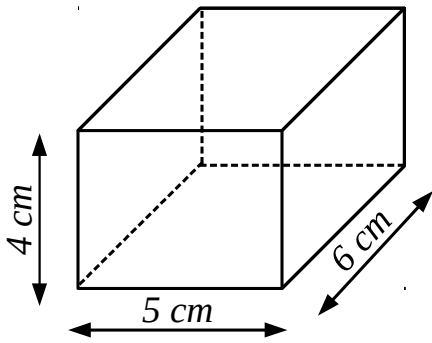
$$6 \overline{) 34}$$

$$5 \overline{) 41}$$

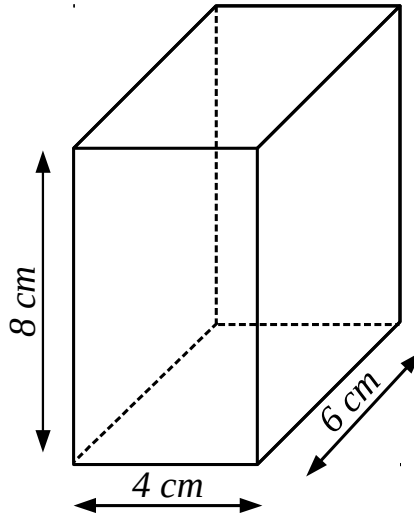
$$6 \overline{) 32}$$

3

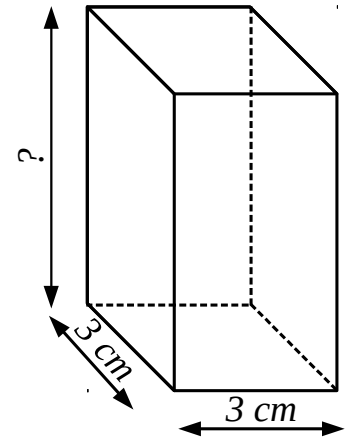
Find the missing values for each parallelepiped:



$$V = \underline{\hspace{2cm}}$$



$$V = \underline{\hspace{2cm}}$$



$$V = 63 \text{ cm}^3$$

4

Convert:

$$1 \text{ dm}^3 = 10 \text{ cm} \times 10 \text{ cm} \times 10 \text{ cm} = 1000 \text{ cm}^3$$

$$2 \text{ dm}^3 = \underline{\hspace{2cm}} \text{ cm}^3$$

$$4 \text{ dm}^3 = \underline{\hspace{2cm}} \text{ cm}^3$$

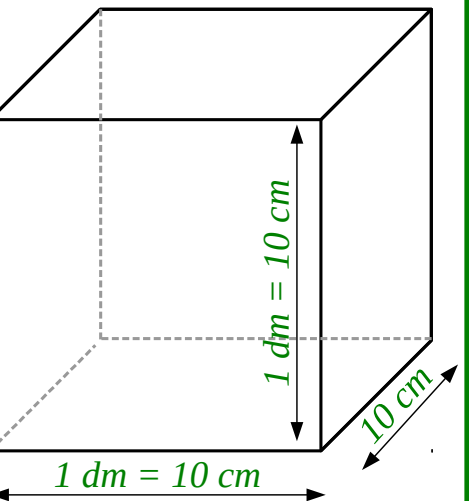
$$\underline{\hspace{2cm}} \text{ dm}^3 = 5000 \text{ cm}^3$$

$$6 \text{ dm}^3 = \underline{\hspace{2cm}} \text{ cm}^3$$

$$\underline{\hspace{2cm}} \text{ dm}^3 = 7000 \text{ cm}^3$$

$$\underline{\hspace{2cm}} \text{ dm}^3 = 8000 \text{ cm}^3$$

$$9 \text{ dm}^3 = \underline{\hspace{2cm}} \text{ cm}^3$$



$$10 \text{ dm}^3 = \underline{\hspace{2cm}} \text{ cm}^3$$

5

Calculate:

$$2 \times 8 \times 10,000 = \underline{\hspace{2cm}}$$

$$5600 \div 80 \times 10 = \underline{\hspace{2cm}}$$

$$50 \times 70 \times 100 = \underline{\hspace{2cm}}$$

$$28000 \div 70 \div 100 = \underline{\hspace{2cm}}$$

$$300 \times 90 \div 10 = \underline{\hspace{2cm}}$$

$$50 \times 80 \times 10 = \underline{\hspace{2cm}}$$

6 Multiply:

$$\begin{array}{r} 1900 \\ \times 60 \\ \hline \end{array}$$

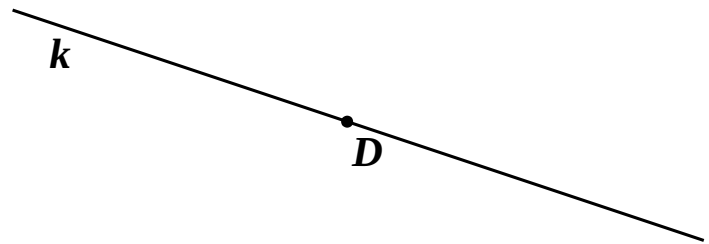
$$\begin{array}{r} 650 \\ \times 70 \\ \hline \end{array}$$

$$\begin{array}{r} 260 \\ \times 800 \\ \hline \end{array}$$

$$\begin{array}{r} 7300 \\ \times 40 \\ \hline \end{array}$$

7

Use a compass and a straight edge to plot a perpendicular to the straight line k through point D . Record your algorithm:



8

Open parentheses. Check your equalities for $a = 1$ and $b = 2$.

$300 - (a + b) = \underline{\hspace{2cm}}$

$300 - (1 + 2) = \underline{\hspace{2cm}}$

$29 - (5 + b) = \underline{\hspace{2cm}}$

$29 - (5 + 2) = \underline{\hspace{2cm}}$

$70 - (b - a) = \underline{\hspace{2cm}}$

$70 - (2 - 1) = \underline{\hspace{2cm}}$

$65 - (a + b + 5) = \underline{\hspace{2cm}}$

$65 - (1 + 2 + 5) = \underline{\hspace{2cm}}$

9 Set $A = \{a, 2, x, \square, 6\}$ Set $B = \{p, x, 2, \bigcirc\}$.

Make a Venn Diagram for these two sets.

$$A \cap B = \underline{\hspace{4cm}}$$

$$A \cup B = \underline{\hspace{4cm}}$$

10 Complete the statements according to the drawing.

$$AB \cap MN = \underline{\hspace{2cm}}$$

$$[MN) \cap AB = \underline{\hspace{2cm}}$$

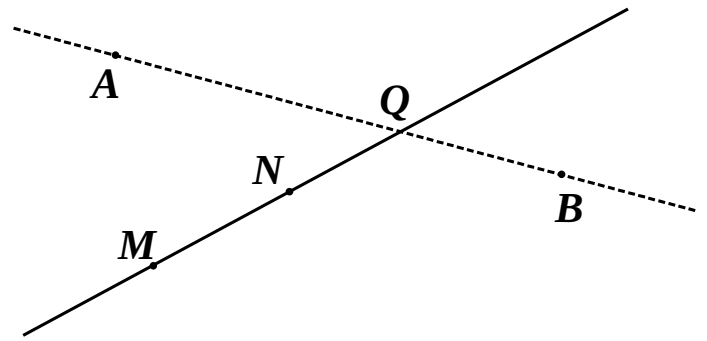
$$[NM) \cap AB = \underline{\hspace{2cm}}$$

$$[MN) \cap [NQ) = \underline{\hspace{2cm}}$$

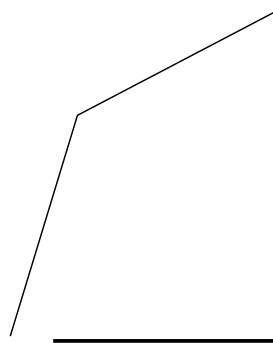
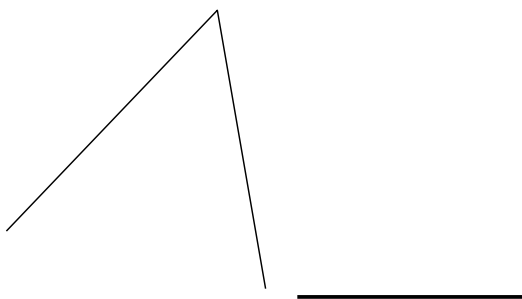
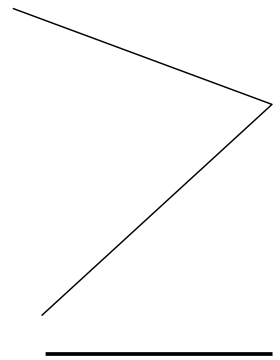
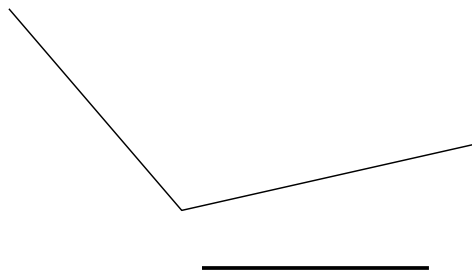
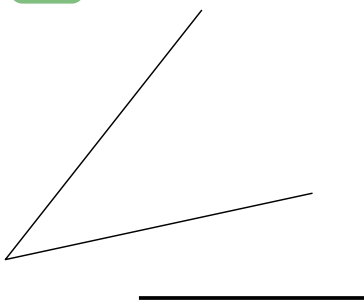
$$[AQ) \cap [QB) = \underline{\hspace{2cm}}$$

$$[AQ) \cap [QB) = \underline{\hspace{2cm}}$$

$$[AB) \cap [MN) = \underline{\hspace{2cm}}$$

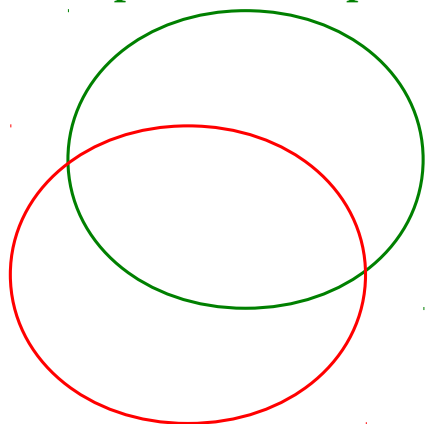


11 Measure the angles below with a protractor:

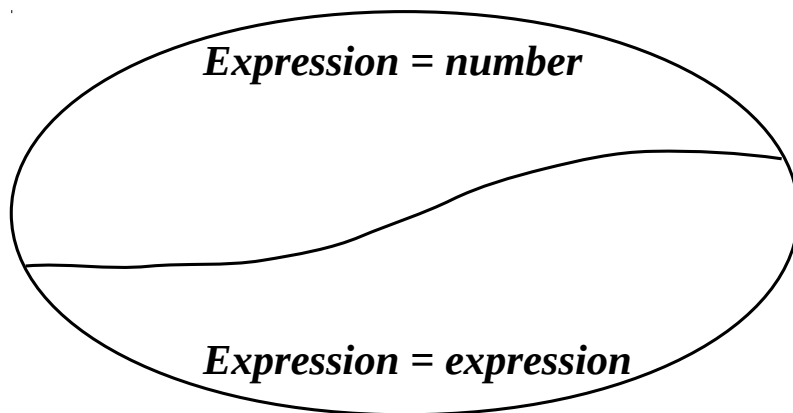


- 12** Assign each of the equations below to the correct Venn Diagram by writing the equation's ID in the diagram:

Expression = expression



Expression = number



A. $5x + 21 = 26$

B. $63 \div x + 2 = 11$

C. $2x + 3 = x + 5$

D. $y \div 7 - 4 = 19$

E. $2x + 3x = x + 16$

F. $w + 2 = 5 + 7$

G. $72 \div (x + 3) = 9$

H. $3y - 12 = 14 + y$

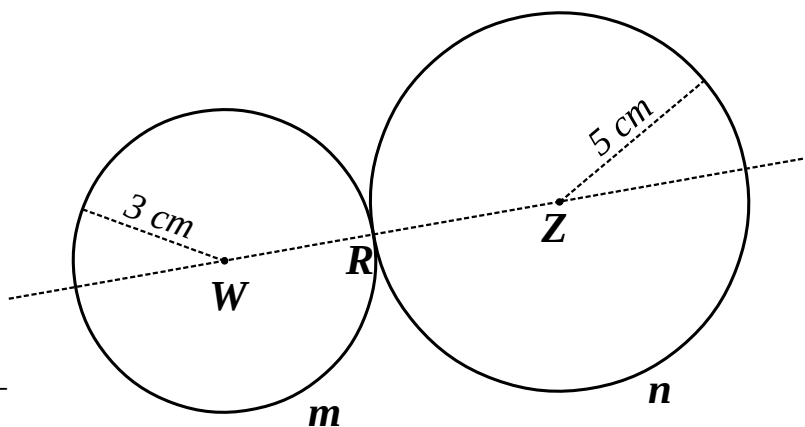
I. $x \div 4 - 3 = 9$

13 $m = \text{Circ}(W, 3 \text{ cm})$

$n = \text{Circ}(Z, 5 \text{ cm})$

$n \cap m = \{R\}$

Find $|WZ|$. _____



- 14** Solve the equations in your notebook. Check your answers and copy them here:

$81 \div y = 9$

$x - 25 = 40$

$5w = 35$

$q + 12 = 201$

$y = \underline{\hspace{2cm}}$

$x = \underline{\hspace{2cm}}$

$w = \underline{\hspace{2cm}}$

$q = \underline{\hspace{2cm}}$

- 15** Count the number of operations in each expression, including the hidden operations.

Expression	Number of operations
$12y$	
$42 - (w + 3)$	
$2x - 3y$	
$4q - 10$	
$3 + 7 - w + (m - 3)$	

Operations of **multiplication** might be hidden in an expression:

$$7x = 7 \times x$$

- 16** Rex is 2 kg heavier than Fluffy and 9 kg lighter than Barbos. Who is heavier, Fluffy or Barbos, and by how much?

_____ ● _____
Rex

_____ is _____ kg heavier.

- 17** Three mice brothers were playing soccer: Jake the Mouse, Little Joe and Pop Eye. One of them accidentally broke the car window. When the cat who owned the car came, they tried to explain what happened:

JM: *LJ broke the window.*

PY: *I did not break the window.*

Only one of the mice told the truth.

Who broke the window?



