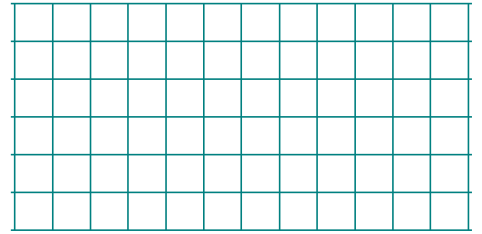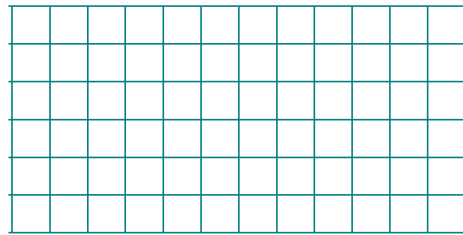# Lesson 12 HW

1   Write expressions to solve the word problems. Make any necessary diagrams.
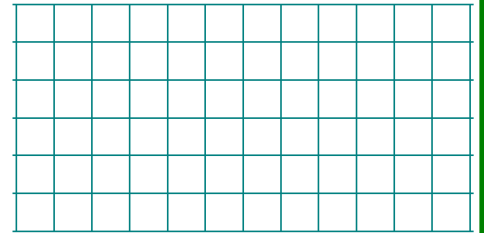
5 identical boxes hold **x** candies. How many candies are in 9 such boxes?
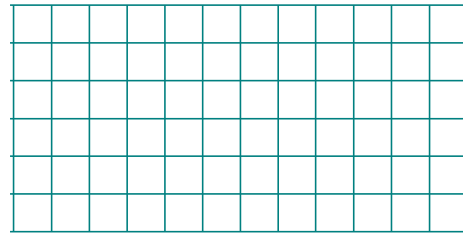
_____

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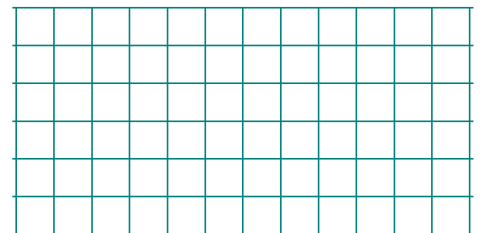
_____

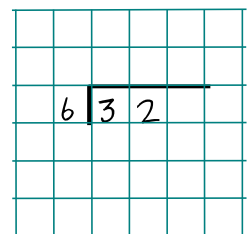A tape transporter moves 20 meters in 4 seconds. How far does it move in **w** seconds?
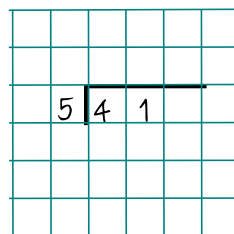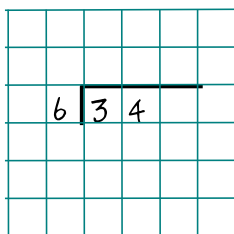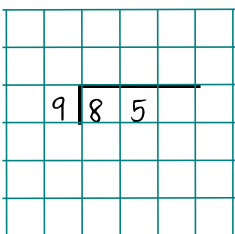
_____

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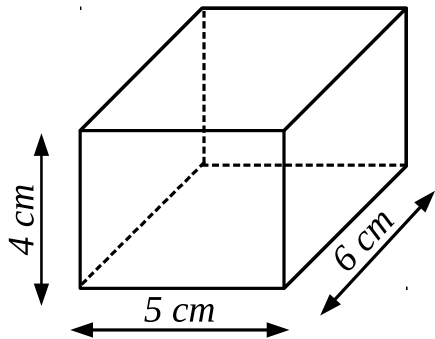
_____

2   Divide with or without a remainder:

9 | 8 | 5   6 | 3 | 4   5 | 4 | 1   6 | 3 | 2

3 Find the missing values for each parallelepiped:

4 cm · 5 cm · 6 cm

$V =$ _____

8 cm · 4 cm · 6 cm

$V =$ _____
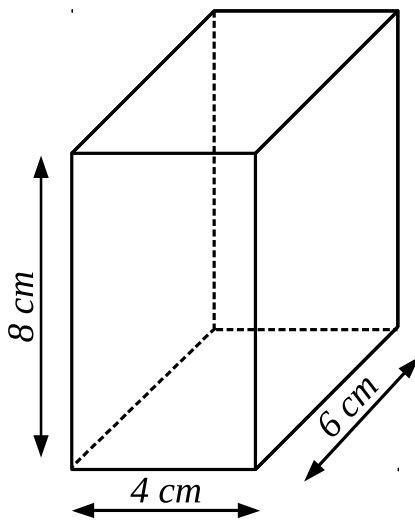
? · 3 cm · 3 cm
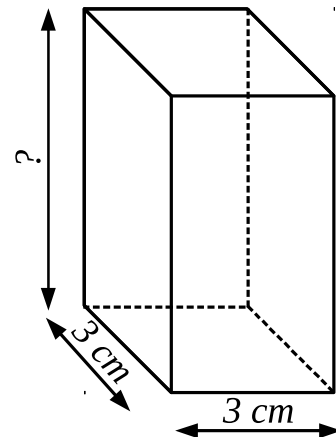
$V = 63$ cm³

4 Convert:

$$1\ dm^3 = 10\ cm \times 10\ cm \times 10\ cm = 1000\ cm^3$$

1 dm = 10 cm

2 dm³ = _____ cm³

4 dm³ = _____ cm³

____ dm³ = 5000 cm³

6 dm³ = _____ cm³   ____ dm³ = 7000 cm³

____ dm³ = 8000 cm³   9 dm³ = _____ cm³   10 dm³ = _____ cm³

5 Calculate:

2 × 8 × 10,000 = _____   5600 ÷ 80 × 10 = _____

50 × 70 × 100 = _____   28000 ÷ 70 ÷ 100 = _____

300 × 90 ÷ 10 = _____   50 × 80 × 10 = _____

6 Multiply:

```
  1 9 0 0            6 5 0            2 6 0            7 3 0 0
      6 0              7 0          8 0 0              4 0
_____          _____        _____        _____
```
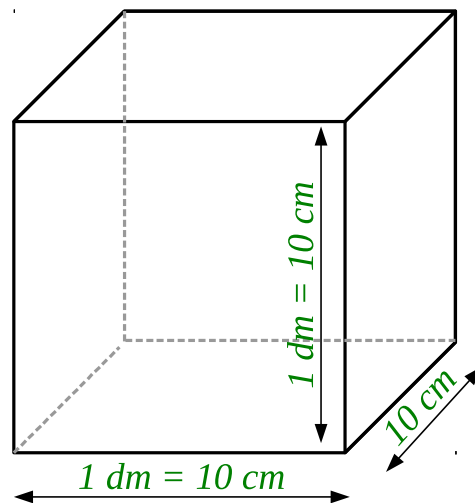
7 Which expressions does the program evaluate?

① : $m \times 4$ ① : $5 \times x$

② : $z + p$ ② : $12 \times y$

③ : ① + ②   ③ : ① + ②

_____   _____

8 Solve the equations in your notebook. Check your answers and copy them here once they are correct.

$81 : y = 9$ $x - 25 = 40$ $5w = 35$ $q + 12 = 201$

$y = $ _____ $x = $ _____ $w = $ _____ $q = $ _____

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

$300 - (a + b) = $ _____ $300 - (1 + 2) = $ _____

$29 - (5 + b) = $ _____ $29 - (5 + 2) = $ _____

$70 - (b - a) = $ _____ $70 - (2 - 1) = $ _____

$65 - (a + b + 5) = $ _____ $65 - (1 + 2 + 5) = $ _____

10 Set **A** = {a, 2, x, □, 6}   Set **B** = {p, x, 2, ○}.

Make a Venn Diagram for these two sets.

A ∩ *B* = _____

A ∪ *B* = _____

11 Complete the statements according to the drawing.

AB ∩ *MN* = _____

[*MN*) ∩ **AB** = _____

[*NM*) ∩ **AB** = _____

[*MN*) ∩ [*NQ*) = _____

[*AQ*) ∩ [*QB*) = _____   [**AQ**] ∩ [*QB*] = _____   [**AB**] ∩ [*MN*] = _____
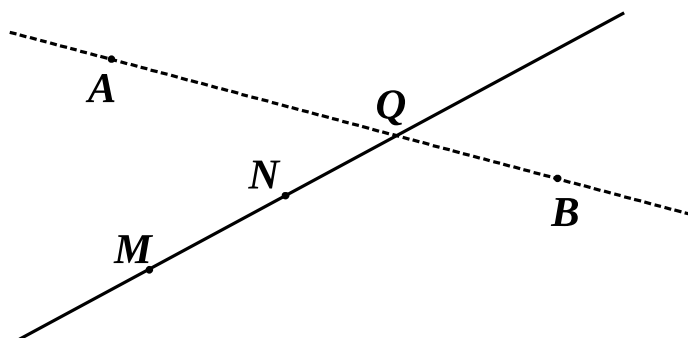
12 Measure the angles below with a protractor:

_____   _____   _____

_____   _____
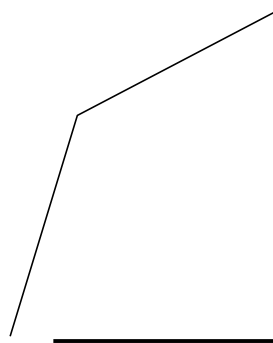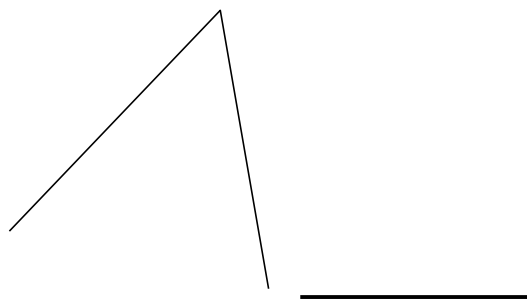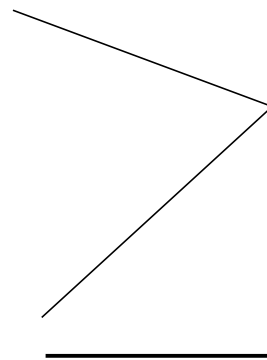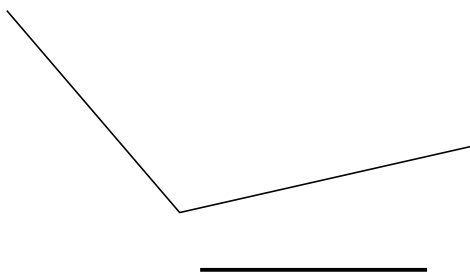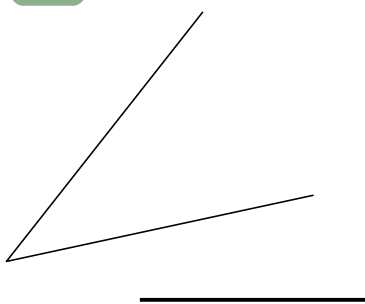
13 Count the number of operations in each expression including the hidden operations.

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

14 Rex is 2kg heavier than Fluffy and 9 kg lighter than Barbos. Which among Fluffy and Barbos is heavier and how much?

$$\bullet$$
$$R$$

_____ is _____ kg heavier.

15 Three mice brothers were playing soccer, Jake the Mouse, Little Joe and Pop Eye. One of them accidentally broke 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?

16 On each plot construct a second angle so that the intersection of the two angles would be a …

a). … point;

c). … triangle;

b). … ray;

d). … line segment.

17 Andrea, Becky, and Carol are sitting around a circular table. Color the same color the tables where the girls are sitting in the same order.

18 To solve the riddle fill in the first table values for *x*; then in the second table arrange the letters in the decreasing order for *x*.

a	1	2	3	4	5	6	7	8	9
x									
	E	N	P	R	O	P	I	U	C

x									
Letter									