

# Algebra grade 5

1. The breadth of a rectangle is  $2dm$ . The length of the rectangle is  $3m$  longer than its breadth.  
What is the perimeter of the rectangle? \_\_\_\_\_ m

2. Express  $6y + 8 - 2y - 5$  in the simplest form (    ) .

A.  $4y + 3$

B.  $4y - 13$

C.  $8y + 3$

D.  $8y - 13$

3. A pencil costs  $y$  cents and a file costs 40 cents more than a pencil.

( 1 ) What is the cost of 2 identical files and 3 identical pencils in cents?

Express your answer in terms of  $y$  in the simplest form.

( 2 ) Shernice wants to buy 2 such files and 3 such pencils but is short of 30 cents. If the pencil costs 90 cents, how much money does Shernice have?

4. The mass of 1 cookbook is thrice as heavy as 1 magazine. 1 cookbook and 4 magazines weigh 5257g. Find the mass of 1 magazine. \_\_\_\_\_ g

5.  $\text{☾} + \text{☾} + \text{☾} = 15$

$\text{⊗} = 4$

$\text{☾} \times \text{⊗} = \text{_____}$

6. What is the missing number?

$2142 \div 20 = ( \quad ) \times 10$ .

A. 1071

B. 107.1

C. 10.71

D. 1.71

7. Study the pattern below, What is the missing number?

202, 230, 200, \_\_\_\_\_, 180, 190

8. A fruit seller has some red and green apples in the ratio of 4 : 3.

There are 80 red apples. How many apples does the fruit seller have in total?

【答案】

1.  $8d + 6$ .

【解析】  $2d + 2d + 3 = 4d + 3$ ,

$$(4d + 3)2 = 8d + 6.$$

2. A

【解析】 N/A.

3. (1)  $(5y + 80)$  cents .

(2) \$ 5 .

【解析】 (1)  $\text{Cost} = (3 \times y) + [2 \times (y + 40)]$

$$= 3y + 2y + 80$$

$$= (5y + 80) \text{ cents.}$$

$$(2) \text{ Shernice has } = (5 \times 90) + 80 - 30 = 500 \text{ cents} = \$ 5 .$$

4. 751

【解析】 N/A.

5. 20

【解析】 N/A.

6. C

【解析】 无解析

7. 210

【解析】 N/A.

8. 140.

【解析】  $4\text{units} = 80$ ,

$1\text{unit} = 20$ ,

$7\text{units} = 20 \times 7 = 140$ .