Think Academy

Incoming G5 Preview

Decimal Operations

Basic Practice

1 Calculate:

(1) $9.24 \div 3 =$ _____

(2) $3.68 \div 2 =$ _____

2 Calculate:

(1) $22.75 \div 7 =$ _____

(2) $30.25 \div 5 =$ _____

3 Calculate:

(1) $42.64 \div 8 =$ _____

(2) $18.54 \div 9 =$ _____

4 Calculate:

(1) $74.1 \div 6 =$ _____

(2) $113.6 \div 8 =$ _____

5 Fill in the blanks.

(1) When calculating $22.8 \div 10$, the decimal point of 22.8 moves _____ (one/two/three) place(s) to the _____ (left/right), and we get the result _____ .

(2) When calculating $3.86 \div 100$, the decimal point of 3.86 moves _____ (one/two/three) place(s) to the _____ (left/right), and we get the result _____ .

6 Calculate:

(1) $4 \div 1000 =$ _____

(2) $23 \div 10 =$ _____

(3) $126.78 \div 100 =$ _____

7 Calculate:

(1) $90 \div 1000 =$ _____

(2) $6.9 \div 10 =$ _____

(3) $725 \div 1000 =$ _____

8 Calculate:

(1) $13.67 \div 1000 =$ _____

(2) $23 \div 1000 =$ _____

(3) $0.35 \div 100 =$ _____

Amazing Time

9 Calculate:

(1) $37.68 \div 12 =$ _____

(2) $27.5 \div 11 =$ _____

10 Calculate:

(1) $67.2 \div 21 =$ _____

(2) $111 \div 12 =$ _____

11 Calculate:

(1) $13.615 \div 35 =$ _____

(2) $65.04 \div 24 =$ _____

12 Calculate:

(1) $180 \div 200 =$ _____

(2) $540 \div 2000 =$ _____

(3) $4.8 \div 20 =$ _____

13 Calculate:

(1) $40 \div 200 =$ _____

(2) $5 \div 2000 =$ _____

(3) $0.28 \div 20 =$ _____

14 Calculate:

(1) $90 \div 2000 =$ _____

(2) $8.8 \div 20 =$ _____

(3) $375 \div 3000 =$ _____

15 Calculate:

(1) $40.8 \div 200 =$ _____

(2) $8.88 \div 20 =$ _____

(3) $168 \div 3000 =$ _____

Place Value

Basic Practice

16 In 2.598,

(1) the digit 9 is in the _____ place.

A. ones B. tenths C. hundredths D. thousandths

(2) the value of the digit 5 is _____ .

A. 0.5 B. 0.05 C. 0.005

(3) the digit 2 is in the _____ place.

A. ones B. tenths C. hundredths D. thousandths

17 In 0.287,

(1) the digit 2 is in the _____ place.

A. ones B. tenths C. hundredths D. thousandths

(2) the value of the digit 7 is _____ .

A. 0.7 B. 0.07 C. 0.007

(3) the digit 0 is in the _____ place.

A. ones B. tenths C. hundredths D. thousandths

18 Write down the expanded form.

(1) $9.493 =$ _____ $+0.4+$ _____ $+0.003$

(2) $1.998 = 1 + 0.9 + 0.09 +$ _____

(3) $9.384 = 9 +$ _____ $+0.08 +$ _____

19 Fill in the blanks.

(1) When calculating $1.228 \times 1,000$, the decimal point of 1.228 moves _____ (one/two/three) place(s) to the _____ (left/right), and we get the result _____ .

(2) When calculating 0.38×10, the decimal point of 0.38 moves _____ (one/two/three) place(s) to the _____ (left/right), and we get the result _____ .

20 Fill in the blanks.

(1) When calculating 7.899×100, the decimal point of 7.899 moves _____ (one/two/three) place(s) to the _____ (left/right), and we get the result _____ .

(2) When calculating 0.248×1000, the decimal point of 0.248 moves _____ (one/two/three) place(s) to the _____ (left/right), and we get the result _____ .

21 Calculate:

(1) $0.233 \times 100 =$ _____

(2) $3.87 \times 10 =$ _____

(3) $3.141 \times 1,000 =$ _____

22 Calculate:

(1) $0.47 \times 1000 =$ _____

(2) $0.23 \times 10 =$ _____

(3) $12.678 \times 1,000 =$ _____

23 Calculate:

(1) $0.88 \times 6 =$ _____

(2) $0.87 \times 3 =$ _____

Amazing Time

24 Calculate:

(1) $3.03 \times 2 =$ _____

(2) $5.42 \times 5 =$ _____

25 Calculate:

(1) $0.285 \times 4 =$ _____

(2) $3.234 \times 9 =$ _____

26 Calculate:

(1) $1.375 \times 20 =$ _____

(2) $7.856 \times 5000 =$ _____

27 Calculate:

(1) $2.782 \times 200 =$ _____

(2) $3.789 \times 500 =$ _____

28 (1) Given that 1 cm $= 10$ mm, 8.578 cm $=$ _____ mm.

(2) Given that 1 m $= 100$ cm, 19.576 m$=$ _____ cm.

29 (1) Given that 1 L $= 1000$ mL, 2.223 L$=$ _____ mL.

(2) Given that 1 km $= 100000$ cm, 13.209 km$=$ _____ cm.

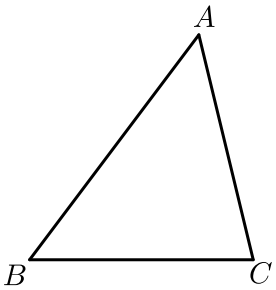
30 A pencil cost 1.45 dollars. Bowen bought 15 pencils. He paid _____ dollar(s) in total.

Geometry

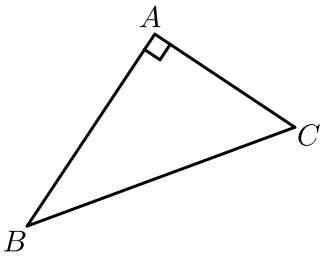
Basic Practice

31 Draw the three heights of following triangles.

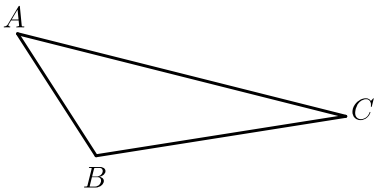
(1)



(2)

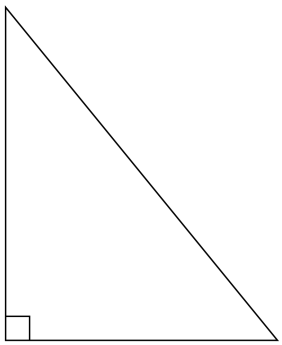


(3)

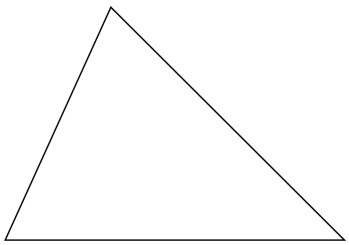


32 Draw the three heights of the following triangles.

(1)

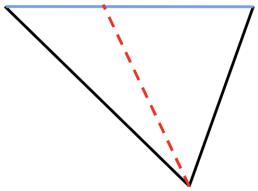


(2)

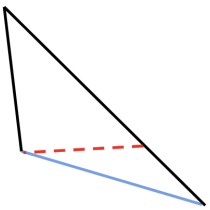


33 Which of the following shows the correct way to draw the height of the triangle?

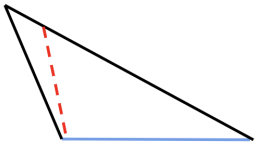
(1)



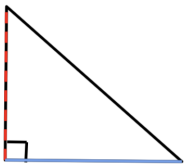
(2)



(3)



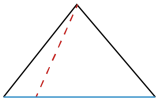
(4)



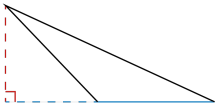
A. (1) B. (2) C. (3) D. (4)

34 Which of the following shows the correct way to draw the height of the triangle?

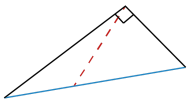
(1)



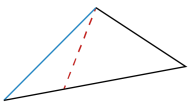
(2)



(3)



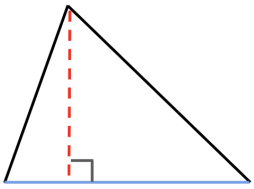
(4)



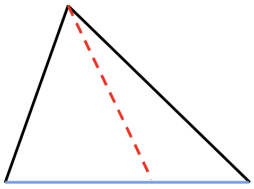
A. (1) B. (2) C. (3) D. (4)

35 Which of the following shows the correct way to draw the height of the triangle?

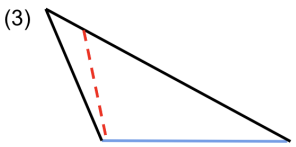
(1)



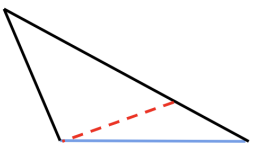
(2)



(3)



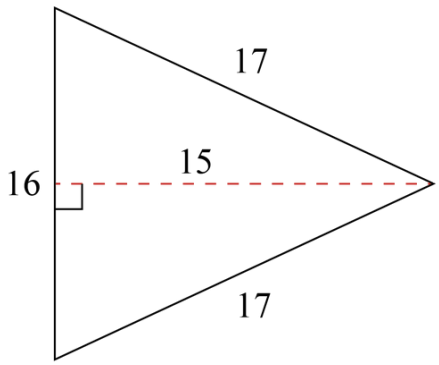
(4)



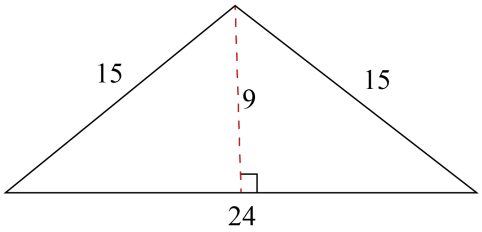
A. (1) B. (2) C. (3) D. (4)

36 Find the area of the following triangles:

(1)

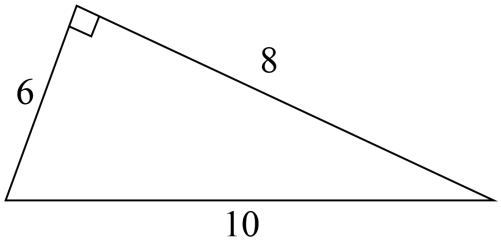


(2)

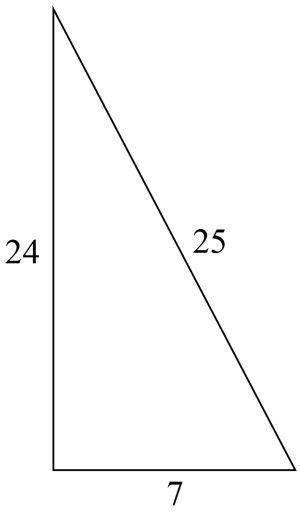


37 Find the area of the following triangles:

(1)

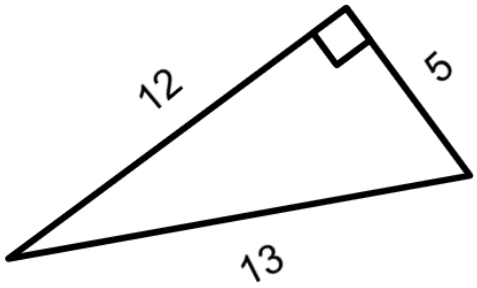


(2)

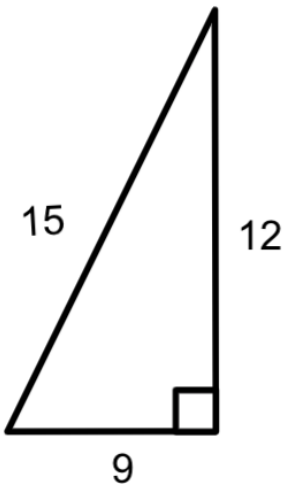


38 Find the area of each triangle:

(1)

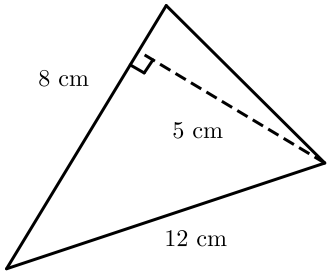


(2)

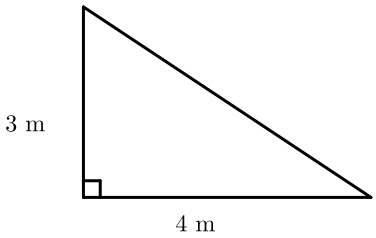


39 Calculate the area of each triangle.

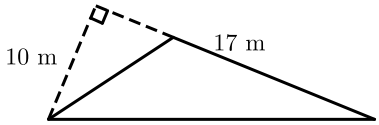
(1)



(2)

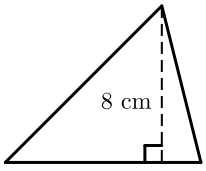


(3)

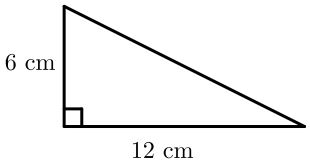


40 Calculate the area of each triangle.

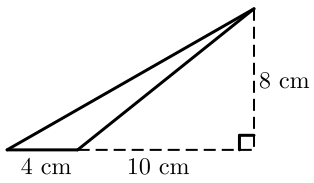
(1)



(2)

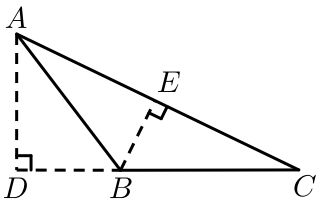


(3)

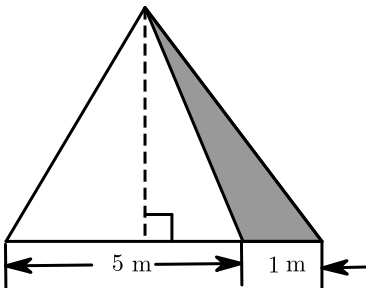


Amazing Time

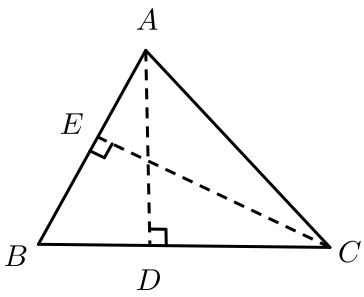
41 As shown below, in triangle ABC, $BC = 6$ cm, $AC = 10$ cm, and $BE = 3$ cm. $AD =$ _____ cm.



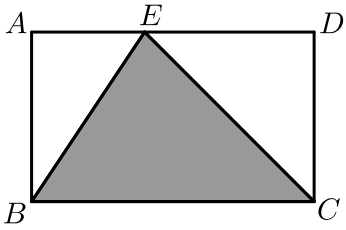
42 The base of a triangle is 5 m. If the base is increased by 1 m, the area of the triangle is increased by 1.5 m^2. The area of the original triangle (the white triangle shown below) is _____ m^2.



43 As shown below, in triangle ABC, $BC = 15$, $AD = 8$, and $AB = 10$. The area of triangle ABC is _____ , and $CE =$ _____ .



44 As shown below, in rectangle $ABCD$, $BC = 10$ cm, $AB = 6$ cm. The area of triangle BEC is _____ cm^2.



45

As shown below, $AE = 3$ cm, $FC = 2$ cm, and the area of triangle BCD is 6 cm^2. The area of triangle ABD is _____ cm^2.