Think Academy

G3 Fall Preview

Day 1

1 Calculate with long multiplication:

(1) $342 \times 21 =$ _____

(2) $690 \times 67 =$ _____

(3) $725 \times 36 =$ _____

2 Calculate with long multiplication:

(1) $107 \times 26 =$ _____

(2) $403 \times 32 =$ _____

(3) $22 \times 14 =$ _____

3 Calculate with long multiplication:

(1) $45 \times 207 =$ _____

(2) $730 \times 80 =$ _____

(3) $350 \times 12 =$ _____

4 Calculate with long multiplication:

(1) $76 \times 19 =$ _____

(2) $39 \times 34 =$ _____

(3) $28 \times 65 =$ _____

5 Calculate with long multiplication:

(1) $51 \times 62 =$ _____

(2) $47 \times 58 =$ _____

(3) $73 \times 32 =$ _____

Day 2

1 Calculate with long division:

(1) $665 \div 25 =$ _____ R _____

(2) $575 \div 25 =$ _____

(3) $208 \div 25 =$ _____ R _____

2 Calculate with long division:

(1) $605 \div 25 =$ _____ R _____

(2) $393 \div 25 =$ _____ R _____

(3) $180 \div 25 =$ _____ R _____

3 Calculate with long division:

(1) $540 \div 30 =$ _____

(2) $416 \div 47 =$ _____ R _____

(3) $927 \div 3 =$ _____

4 Calculate with long division:

(1) $754 \div 29 =$ _____

(2) $954 \div 30 =$ _____ R _____

(3) $738 \div 20 =$ _____ R _____

5 Calculate with long division:

(1) $468 \div 6 =$ _____

(2) $683 \div 6 =$ _____ R _____

(3) $452 \div 8 =$ _____ R _____

Day 3

1 Calculate:

(1) $125 \times (10 + 8) =$ _____

(2) $(100 - 1) \times 4 =$ _____

(3) $23 \times (6 + 10 + 30) =$ _____

2 Calculate:

(1) $35 \times 102 =$ _____

(2) $(125+13-20)\times 4=$ _____

(3) $79\times(100+1)=$ _____

3 Calculate:

(1) $25\times 99+25=$ _____

(2) $101\times 34-34=$ _____

4 Calculate:

(1) $98 \times 18 - 98 \times 8 =$ _____

(2) $67 \times 49 + 67 \times 52 - 67 \times 1 =$ _____

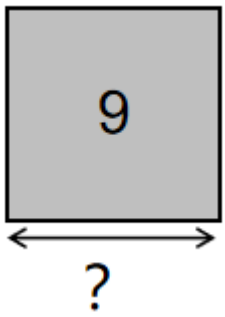
5 Calculate:

(1) $75 \times 24 + 75 \times 77 - 75 =$ _____

(2) $28 \times 59 + 40 \times 28 + 28 =$ _____

Day 4

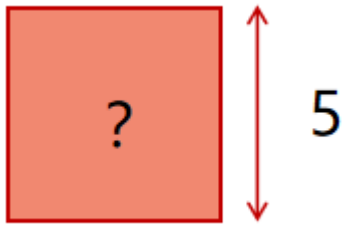
1 The area of the square is 9.



(1) The side length of the square is _____ .

(2) The perimeter of the square is _____ .

2 A square has a side length of 5.



(1) The area of the square is _____ .

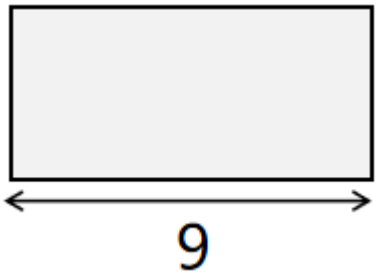
(2) The perimeter of the square is _____ .

3 A rectangle has a length of 6 and a width of 3.

(1) The perimeter of the rectangle is _____ .

(2) The area of the rectangle is _____ .

4 A rectangle has a perimeter of 28 and a length of 9.

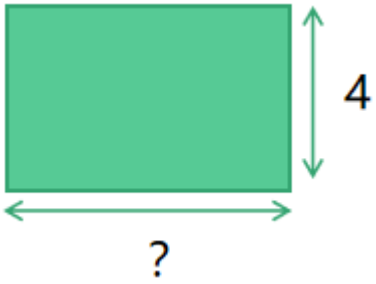


(1) A rectangle has a width of _____ .

(2) The area of the rectangle is _____ .

5

The area of a rectangle is 28 and it has a width of 4.

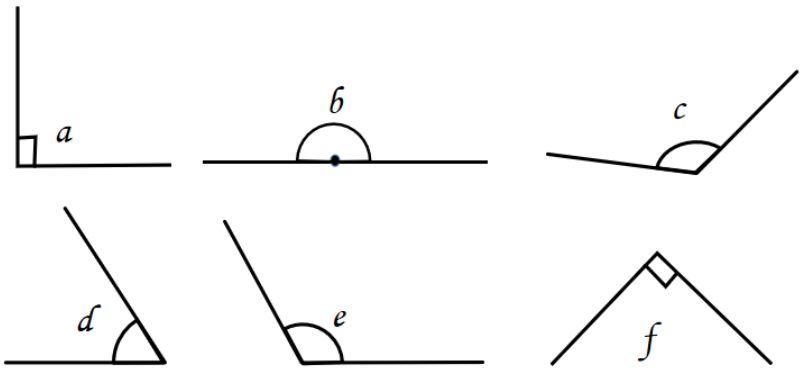


(1) The length of the rectangle is _____ .

(2) The perimeter of the rectangle is _____ .

Day 5

1 Look at the given angles and answer the following questions.

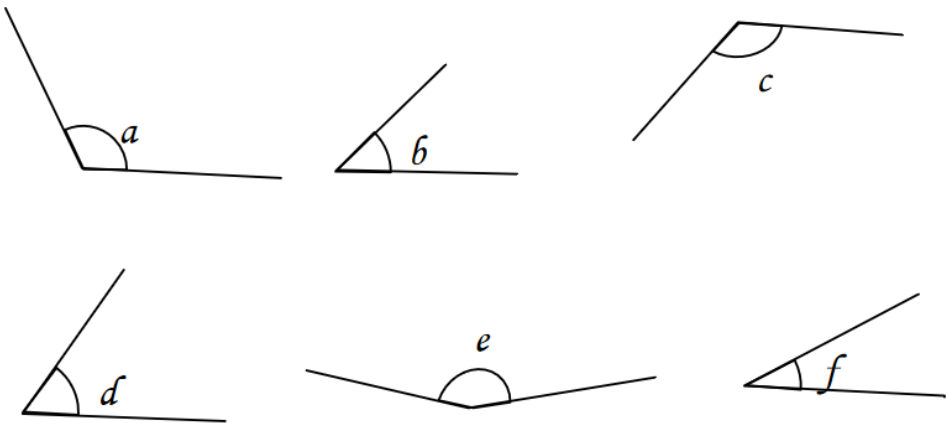


(1) ∠ _____ and ∠ _____ are right angles.

(2) ∠ _____ and ∠ _____ are obtuse angles.

(3) ∠ _____ is a flat angle.

2 Look at the given angles and answer the following questions.



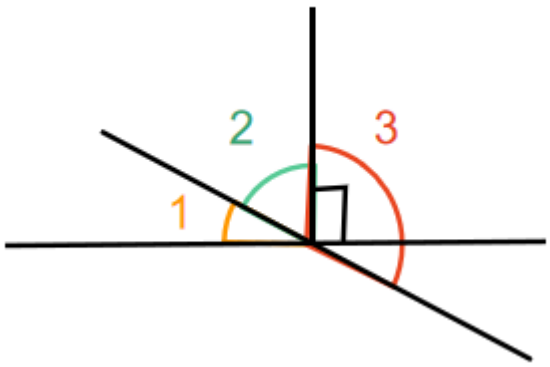
(1) Which angles are acute?

∠ _____ , ∠ _____ , and ∠ _____ .

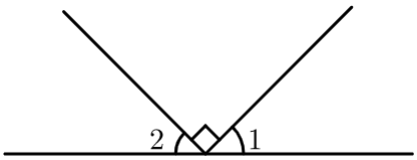
(2) Which angles are obtuse?

∠ _____ , ∠ _____ , and ∠ _____ .

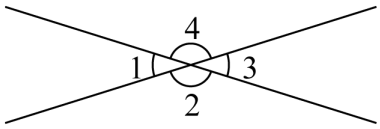
3 There are two straight lines and a ray as shown in the figure. If $\angle 1 = 25°$, then $\angle 2 =$ _____ °, and $\angle 3 =$ _____ °.



4 As shown, if $\angle 1 = \angle 2$, then $\angle 2 =$ _____ °.

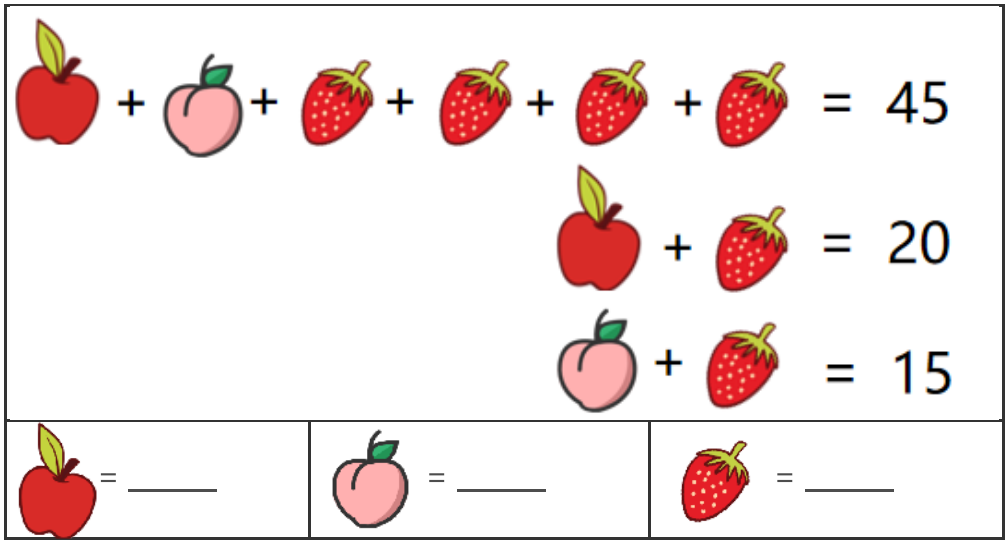


5 As shown in the figure, if $\angle 1 = 20°$, then $\angle 4$ = _____ ° .

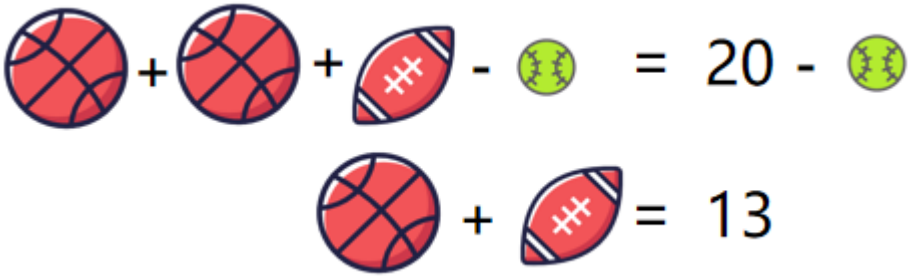


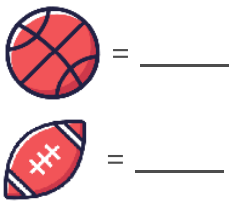
Day 6

1 Fill in the blanks. The same shape represents the same number, and different shapes represent different numbers.



2 Fill in the blanks. The same shape represents the same number, and different shapes represent different numbers.



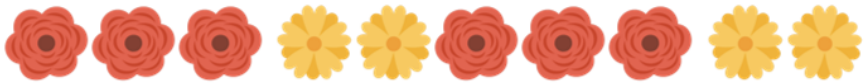


3 Fill in the blanks. The same shape represents the same number, and different shapes represent different numbers.

= _____


= _____

4 There is a sequence of flowers as shown below:



(1) The 39^{th} flower is _____ (red/yellow).

(2) There are _____ red flowers among the first 37 flowers.

5 There is a number sequence as shown below:

$1, 4, 2, 8, 5, 7, 1, 4, 2, 8, 5, 7, 1, 4, 2, 8, 5, 7, \cdots$

(1) The 62^{nd} number is _____ .

(2) The sum of the first 20 numbers is _____ .

Day 7

1 Calculate:

(1) $\frac{3}{7} + \frac{2}{7} =$ _____

(2) $\frac{8}{11} - \frac{6}{11} =$ _____

(3) $\frac{4}{15}+\frac{7}{15}=$ _____

(4) $\frac{11}{18}+\frac{3}{18}=$ _____

2 Fill in the blanks!

(1) $\frac{2}{7}=\frac{2\times(\quad)}{7\times3}=\frac{(\quad)}{(\quad)}$

(2) $\frac{15}{18}=\frac{15\div3}{18\div(\quad)}=\frac{(\quad)}{(\quad)}$

(3) $\frac{5}{12}=\frac{5\times(\quad)}{12\times(\quad)}=\frac{20}{(\quad)}$

(4) $\frac{6}{7}=\frac{24}{(\quad)}$

(5) $\frac{16}{32}=\frac{(\quad)}{2}$

(6) $\frac{15}{20}=\frac{3}{(\quad)}$

3 Judge whether each of the following sequences is an arithmetic sequence. Fill in √ if yes, and fill in × if not.

1. $15, 19, 23, 27, 31, 35, 39, \cdots$ _____
2. $38, 36, 34, 30, 28, 26, \cdots$ _____
3. $45, 40, 35, 30, 25, 20, 15, \cdots$ _____

4 Fill in the blanks:

(1) In the arithmetic sequence $2, 5, 8, 11, \cdots$, the 32^{nd} term is _____ .

(2) In the arithmetic sequence $4, 8, 12, 16, \cdots$, the 15^{th} term is _____ .

5 Solve the following problems:

(1) The arithmetic sequence $5, 11, 17, 23, \cdots, 119$ has a total of _____ terms.

(2) The arithmetic sequence $10, 13, 16, 19, \cdots, 91$ has a total of _____ terms.