Think Academy

Review Class AM L7-L9

2022 Fall G3

Lesson 7

1 True or false.

1. All isosceles triangles are equilateral triangles.

2. All figures formed by 3 line segments are triangles.

3. The measure of the angle with the greatest measure in an acute triangle must be less than 90°.

2 Which group of line segments below can form a triangle?

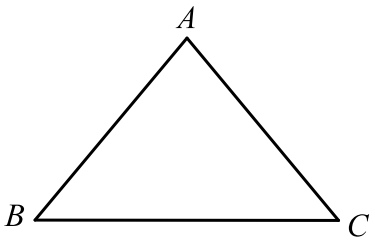
A. 3 cm, 3 cm, 6 cm

B. 9 cm, 13 cm, 23 cm

C. 7 cm, 8 cm, 9 cm

D. 5 cm, 6 cm, 12 cm

3 As shown in the figure below, $\triangle ABC$ is an isosceles triangle, $AB = AC$, and $\angle B = 47°$. $\angle A =$ _____ $°$.



Lesson 8

1 Jack wants to buy a birthday gift to his friend Carl. There are 5 different kinds of toy planes, 9 different kinds of toy cars, and 11 different kinds of water bottles. Jack has in total _____ different choices to choose a gift.

2 School restaurant sells apple juice, orange juice, peach juice, hot dog, sandwich, noodle, and hamburger. If Wiliam can only pick one drink and one food item for his dinner, then there are _____ different choices for him to choose from.

3 Five students (including Allen and Samantha) are lining up to take a picture. If Allen wants to stand in the middle, and Samantha wants to stand on the most left side, in how many different ways can the five students line up?

Lesson 9

1 Simplify the following expressions:

(1) $a \times 1 + b \times 2 + a \times 3 =$ _____ .

(2) $3 \times c \times f \times 9 =$ _____ .

(3) $x \times y - z =$ _____ .

(4) $2a \times a + 4b \times 3b \times b =$ _____ .

2 Simplify the following expressions:

$12a + (4d - 3a) =$ _____ ;

$5x - (6y + x) =$ _____ ;

$15 + 16a - (8a - a^2 + 12) =$ _____ ;

$(6b - 7bc) - (7c + 14bc + 9) =$ _____ .

3 Simplify the following expressions:

$(6 + a) \times 2 =$ _____ ;

$(b + 3c) \times 5 =$ _____ ;

$(2p - 3q) \times k =$ _____ ;

$2a \times (7m + 2n) =$ _____ .

Solutions

Lesson 7

1. FFT

2. C

3. 86

Lesson 8

1. 25

2. 12

3. 6

Lesson 9

1. (1) $4a + 2b$
   (2) $27cf$
   (3) $xy - z$
   (4) $2a^2 + 12b^3$

2. $9a + 4d$; $4x - 6y$; $a^2 + 8a + 3$;
   $6b - 7c - 21bc - 9$

3. $2a + 12$; $5b + 15c$; $2pk - 3qk$;
   $14am + 4an$