

A field trip to the aquarium is scheduled for next wednesday. The ratio of teachers to students is 3:40. If 9 adults go, how many students will go?

- A. 40
- B. 9
- C. 60
- D. 120
- E. 136

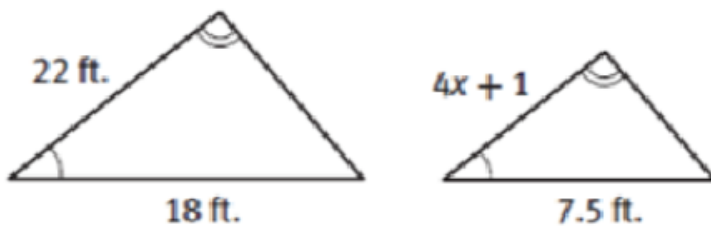
A zoo has ratio of cats to monkeys of 5:3. If there are a total of 56 animals, how many monkeys are there?

- A. 56
- B. 35
- C. 21
- D. 5
- E. 3

The ratio of boys to girls in a class is 2:3. If there are 18 girls in the class, how many boys are there?

- | | |
|-------|-------|
| a. 6 | c. 12 |
| b. 10 | d. 27 |

set up a proportion to solve for x. *



- A. 8.67
- B. 4.22
- C. 2.04
- D. 1.68

The smaller triangle has sides of 3,4,5. The scale factor between this triangle and a bigger one is 3:1. What is the perimeter of the bigger triangle?

- A. 24
- B. 28
- C. 32
- D. 36

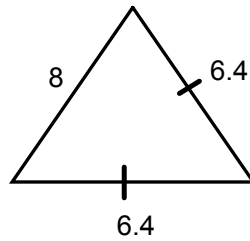
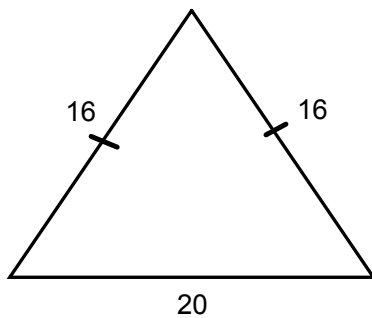
$$11) \frac{7}{v+9} = \frac{4}{v}$$

- | | |
|------------------|------------|
| A) None of these | B) {9.717} |
| C) {4.4} | D) {-1.9} |
| *E) {12} | |

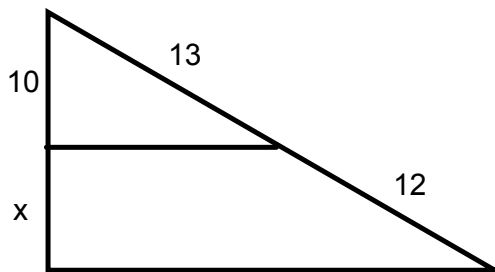
$$12) \frac{k+2}{4} = \frac{k}{10}$$

- | | |
|------------------|-------------|
| A) None of these | B) {-3.1} |
| C) {-1.9} | *D) {-3.33} |
| E) {-2} | |

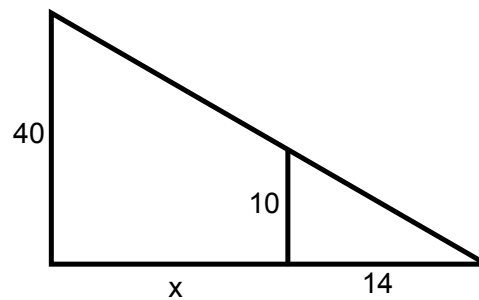
23) Choose the correct option



- A. Similar
- B. Congruent
- C. Both
- D. None of the above



- A. 14.36
- B. 12.56
- C. 11.91
- D. 9.23
- E. 7.76



- A. 44
- B. 42
- C. 40
- D. 38
- E. 36

15) Naomi wants to calculate the height of a tree. She is 1.2 m tall and casts a shadow of 2.75 m. At the same time, the shadow of the tree is 10.5 m long. How tall is the tree?

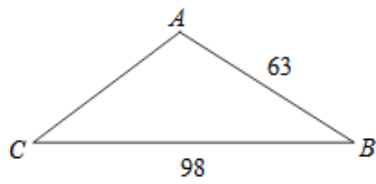
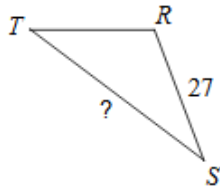
- A. 4.58 m
- B. 6.62 m
- C. 7.24 m
- D. 8.66 m
- E. 9.94 m

16) A small square has a perimeter of 64. There is a bigger square that is enlarged with a scale factor of 5:2. What is one side of that bigger square?

- A. 44
- B. 42
- C. 40
- D. 38
- E. 36

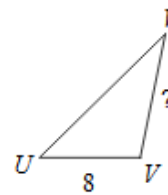
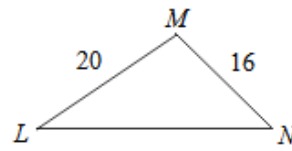
Find the missing sides of these similar triangles

7) $\triangle ABC \sim \triangle RST$



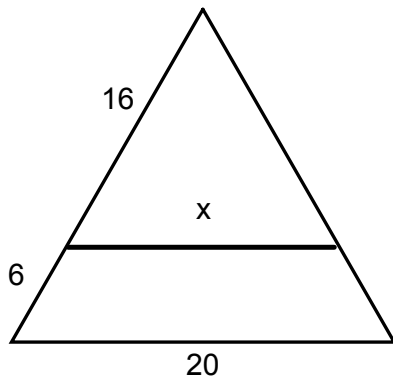
- A) 55 B) 24 C) 39
 *D) 42 E) 46

8) $\triangle LMN \sim \triangle WVU$



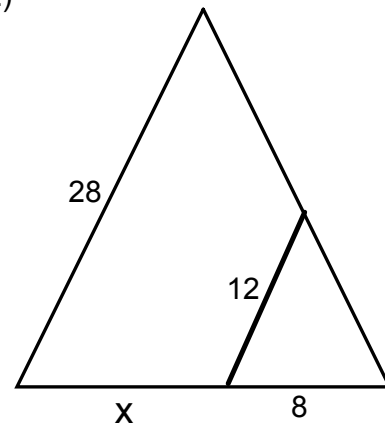
- A) 15 B) 9 C) 10
 D) 13 E) 8

11)



- A. 5.86 B. 8.64 C. 14.54
 D. 16.78 E. 18.24

12)



- A. 10.6 B. 8.64 C. 7.54
 D. 6.7 E. 5.64