

EYE ON MASTERY
Instructor Guided Practice Skills
SECTION 3

11. Finding ratios of relationships.

This table indicates the types of movies available for rent.

What is the ratio of:

action to science fiction

drama to comedy

horror to action

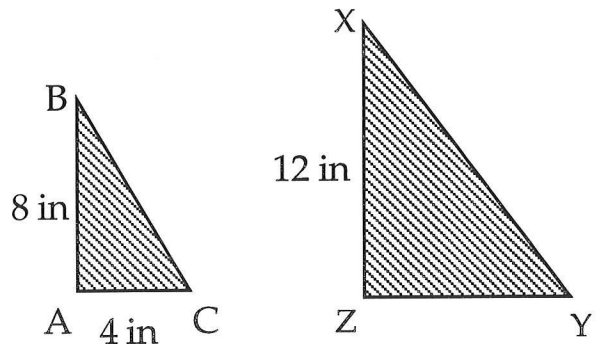
horror to total number of movies listed

Movies

Action	60
Comedy	25
Drama	25
Sci.-Fiction	40
Horror	50

12. Use proportional relationships of similar figures to find missing measurements.

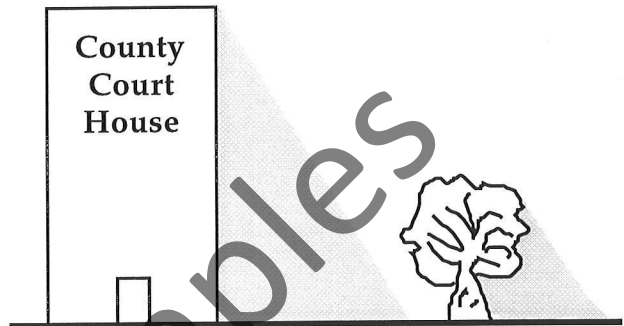
According to the given lengths of these two similar triangles, what is the length of ZY?



11. There are 6 white roses and 9 red roses in the flower garden. Which of the following is the ratio of red roses to white roses?

- A 3 to 2
- B 2 to 3
- C 2 to 5
- D 5 to 2

12. During the afternoon of a sunny day, the County Court House casts a shadow of 30 feet. At the same time of day, a tree 30 feet tall is casting a shadow of 10 feet. What is the height of the County Court House?

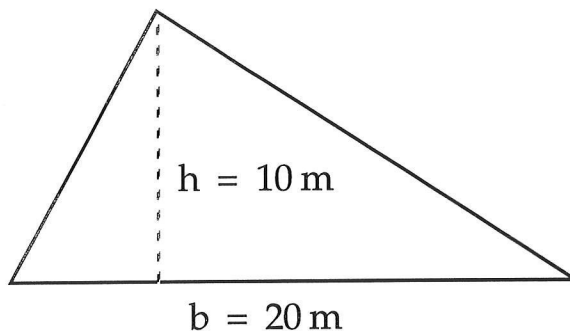


- A 30 ft
- B 60 ft
- C 70 ft
- D 90 ft

Grade 8 Samples

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SECTION 5

5. Find the area of this triangle.



What happens to the area of this triangle if the base and height are cut in *half*?

Is the area of the new triangle half as much as the area of the original triangle?

6. Write a linear equation for the following story problem.

Mrs. Jamison purchases 3 gifts for her children. The cost for each gift is \$9.95. In addition, there is a \$2 fee to wrap each gift. Write an equation that will find the total cost C , of her bill not including taxes.

5. The following table shows changes in the area of a square as the side length of the square is enlarged.

Square Enlargement

Side Length	Area of Square
2 in	4 in ²
4 in	16 in ²
8 in	64 in ²
16 in	256 in ²

As the side length of a square doubles, what happens to the area of the square?

- A The area stays the same.
- B The area doubles.
- C The area triples.
- D The area is four times as much.

6. On average, machine X can process more fabric than machine Y by a factor of 1.8. Given y , the amount of fabric machine Y processes, which equation can be used to find x , the amount of fabric machine X processes?

- A $x = y + 1.8$
- B $x = y \div 1.8$
- C $x = 1.8y$
- D $x = 1.8 \div y$