

7-1 Ratios and Proportions

14. The ratio of the measures of the three sides of a triangle is 3: 7: 5, and its perimeter is 156.8 meters. Find the measure of each side.

ANSWER:

31.4 m, 73.2 m, 52.3 m

Find the measures of the angles of each triangle.

18. The ratio of the measures of the three angles is 7:5:8.

ANSWER:

63, 45, 72

ALGEBRA Solve each proportion. Round to the nearest tenth.

31. $\frac{2x+3}{3} = \frac{6}{x-1}$

ANSWER:

3, -3.5

32. $\frac{x^2+4x+4}{40} = \frac{x+2}{10}$

ANSWER:

2, -2

33. $\frac{9x+6}{18} = \frac{20x+4}{3x}$

ANSWER:

12.9, -0.2

34. The perimeter of a rectangle is 98 feet. The ratio of its length to its width is 5: 2. Find the area of the rectangle.

ANSWER:

490 ft²

35. The perimeter of a rectangle is 220 inches. The ratio of its length to its width is 7: 3. Find the area of the rectangle.

ANSWER:

2541 in²