

Chapter 8 Review-Jeopardy Game

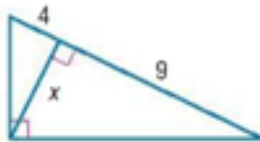
8-1 Geometric Means

10-Find the geometric mean between 9 and 8.

$$6\sqrt{2}$$

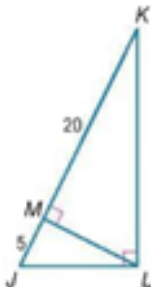
20-Find x.

$$6$$



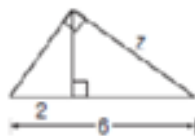
30-Find JL

$$5\sqrt{5}$$



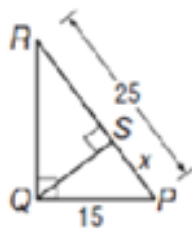
40-Find z

$$2\sqrt{6}$$



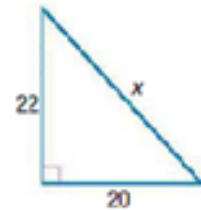
50-Find x

$$9$$



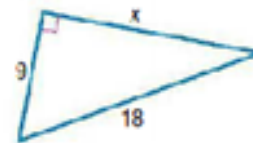
8-2 Pythagorean Theorem

10-Find x



$$2\sqrt{221}$$

20-Find x



$$9\sqrt{3}$$

30- Determine whether 7, 24, and 25 could be the sides of a triangle. If so, classify the triangle as *acute*, *obtuse* or *right*.

yes, right

40- Determine whether 13, 15, and 16 could be the sides of a triangle. If so, classify the triangle as *acute*, *obtuse* or *right*.

yes, acute

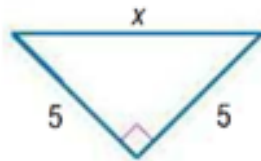
50- Determine whether 65, 72, and 140 could be the sides of a triangle. If so, classify the triangle as *acute*, *obtuse* or *right*.

Not a Δ

8-3 Special Right Triangles $45^\circ-45^\circ-90^\circ$

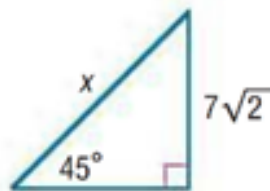
10-Find x

$$5\sqrt{2}$$



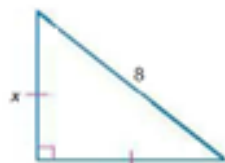
20-Find x

$$14$$



30-Find x

$$4\sqrt{2}$$



40-What is the length of the diagonal of a square if the length of the leg is $6\sqrt{2}$?

$$12$$

50-Find the perimeter of a square if the length of the diagonal is 10.

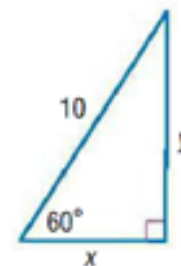
$$20\sqrt{2}$$

8-3 Special Right Triangles $30^\circ-60^\circ-90^\circ$

10-Find x and y

$$x = 5$$

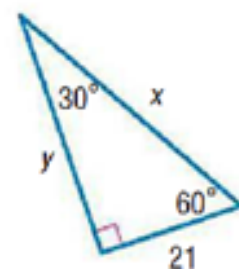
$$y = 5\sqrt{3}$$



20-Find x and y

$$x = 42$$

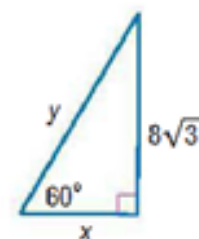
$$y = 21\sqrt{3}$$



30-Find x and y

$$x = 8$$

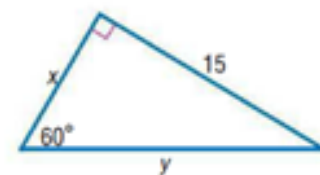
$$y = 16$$



40-Find x and y

$$x = 5\sqrt{3}$$

$$y = 10\sqrt{3}$$

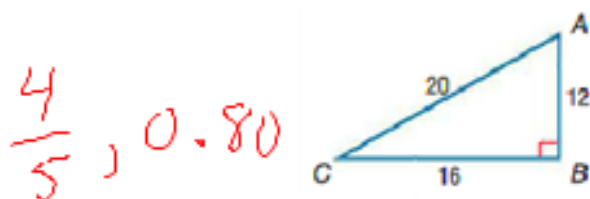


50- An equilateral triangle has an altitude length of 18 feet. Determine the length of a side of the triangle.

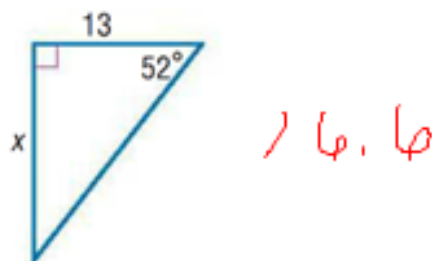
$$12\sqrt{3}$$

8-4 Trigonometry

10- Express $\sin A$ as a fraction and as a decimal rounded to the nearest hundredth.



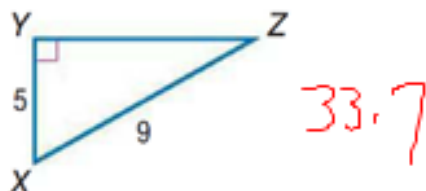
20-F Find x . Round to the nearest tenth.



30-Find x . Do NOT give a decimal answer.



40-Find the measure of angle Z to the nearest tenth.

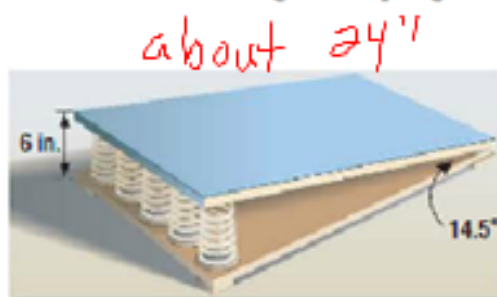


50-Find the measure of angle Z to the nearest tenth.



Miscellaneous

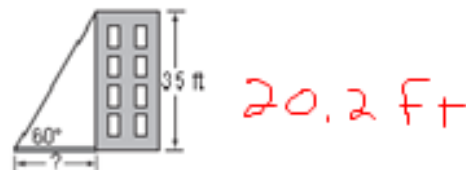
20-The springboard that Eric uses in his gymnastics class has 6-inch coils and forms an angle of 14.5° with the base. About how long is the springboard?



40- Alexi walks 27 meters south and 38 meters east to get around a lake. Her sister swims directly across the lake. How many meters to the nearest tenth did Alexi's sister save by swimming?

18.4 m

60-Suppose the sun casts a shadow off a 35-foot building. If the angle of elevation to the sun is 60° , how long is the shadow to the nearest tenth of a foot?



80- Find the length of the side of an equilateral triangle that has an altitude length of 24 feet.

$16\sqrt{3}$

100- A ski run is 1000 yards long with a vertical drop of 208 yards. Find the angle of depression from the top of the ski run to the bottom. Round to the nearest degree.

