Simplifying Radicals.

1. $\sqrt{20}$

2. $\sqrt{75}$

3. $3\sqrt{32}$

4. $5\sqrt{27}$

5. $\sqrt{90a^2b^5}$

6. $\sqrt{162x^3y^4z^6}$

7. $\dfrac{4\sqrt{3}}{\sqrt{2}}$

8. $\dfrac{2\sqrt{6}}{3\sqrt{2}}$

9. $\dfrac{3\sqrt{2}}{4-\sqrt{7}}$

10. $\dfrac{12}{\sqrt{3}-\sqrt{6}}$

Operations with Radicals.

1. $3\sqrt{5}+2\sqrt{2}-11\sqrt{5}$

2. $3\sqrt{20}+2\sqrt{8}-2\sqrt{45}-5\sqrt{18}$

3. $2\sqrt{3}\left(3\sqrt{2}-4\sqrt{6}\right)$

4. $\sqrt{5}\left(3\sqrt{15}+\sqrt{10}\right)$

5. $\left(2\sqrt{3}-5\sqrt{10}\right)\left(2\sqrt{3}+3\sqrt{15}\right)$

6. $\left(\sqrt{6}-2\sqrt{8}\right)\left(\sqrt{24}+3\sqrt{2}\right)$

Solving Radical Equations.

1. $\sqrt{12-k}=k$

2. $p=\sqrt{-1-2p}$

3. $\sqrt{-16+10r}=r$

4. $-2+\sqrt{6g+19}=g$

5. $x-7=\sqrt{3x-21}$

6. $m-4=\sqrt{10-3m}$

Use the quadratic formula to find and identify {rational, irrational, DNE} the solutions to each of the following: Note irrational answers should be reported to the nearest tenth, rational answers should be reported as appropriate fractions.

1. $a^2-5a-9=0$

2. $8y^2+10y+3=0$

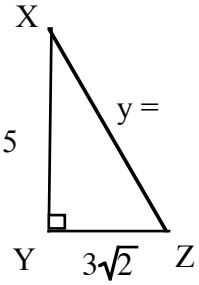
3. $2r^2+5r-1=0$

4. $3w^2+8w+2=0$

5. $2b^2-b-15=0$

Use the Pythagorean Theorem to find the missing side.

1.



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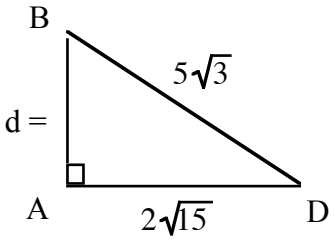

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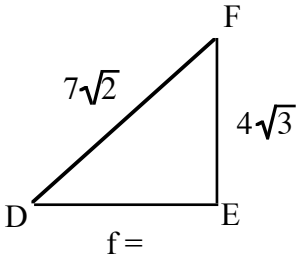


Classify each set of triangle sides as obtuse, acute, right, or not a triangle

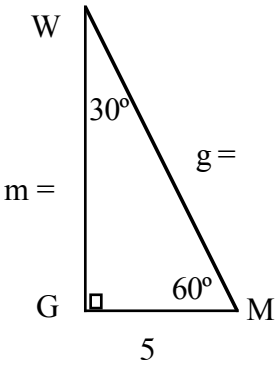
1. 5, 7, 9
2. 14, 48, 50
3. $3\sqrt{5}$, $5\sqrt{6}$, 15
4. $2\sqrt{3}$, $3\sqrt{5}$, $\sqrt{57}$
5. 5, 7, 14

Find the Distance between each set of points.

1. (–2 , 4) (4 , –2)
2. (3 , 1) (–2 , –2)
3. (3 , 6) (5 , –5)
4. (–2 , 4) (7 , –8)

Finding Sides to Special Right Triangles.

1.



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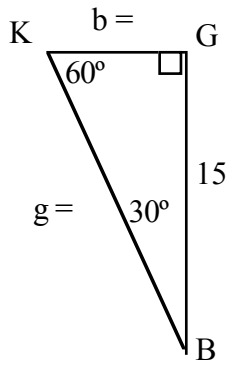

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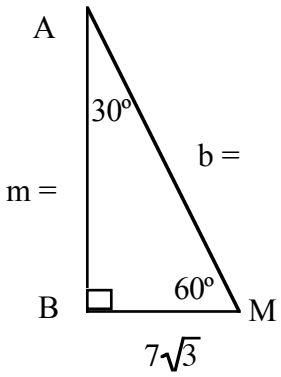

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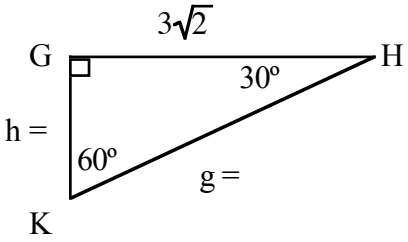

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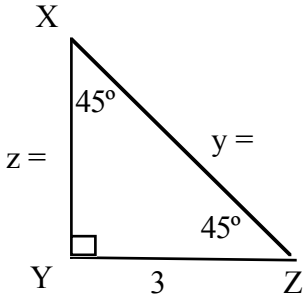

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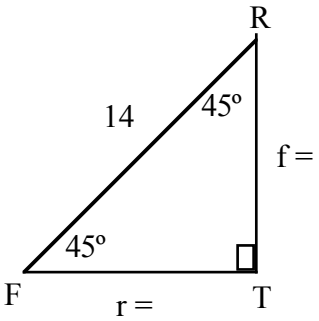

7.