

Using Special Right Triangle Relationships

Name _____

1. $\sqrt{2} + \frac{\sqrt{2}}{\sqrt{2}} = 8$
 $2\sqrt{2}$

2. $3\sqrt{3} + \sqrt{3}$
 $4\sqrt{3}$

3. $\frac{1}{2}\sqrt{2} + \sqrt{2}$
 $1\frac{1}{2}\sqrt{2}$

4. $\frac{1}{2}\sqrt{3} + 2\sqrt{3}$
 $2\frac{1}{2}\sqrt{3}$

5. $L\sqrt{2} = 8$
 $\frac{\sqrt{2}}{\sqrt{2}} \frac{\sqrt{2}}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$
 $L = 4\sqrt{2}$

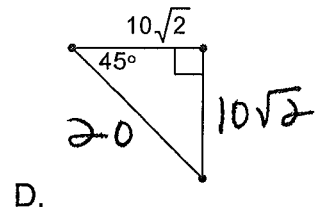
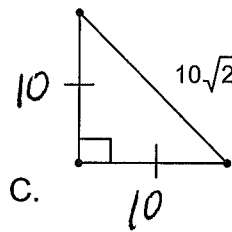
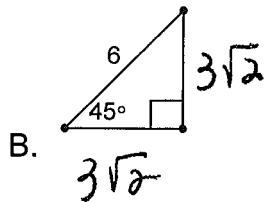
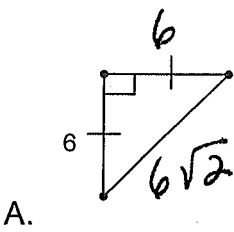
6. $L\sqrt{2} = 8\sqrt{2}$
 $L = 8$

7. $2L\sqrt{2} = 8$
 $L\sqrt{2} = 4$
 $\frac{\sqrt{2}}{\sqrt{2}} \frac{\sqrt{2}}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$
 $L = 2\sqrt{2}$

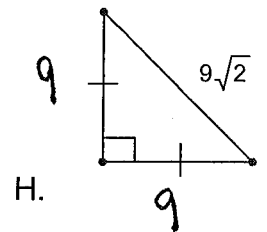
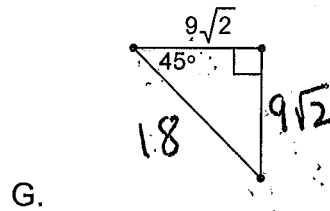
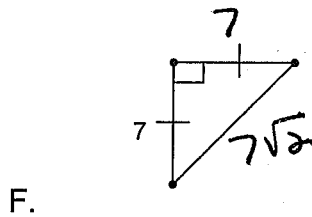
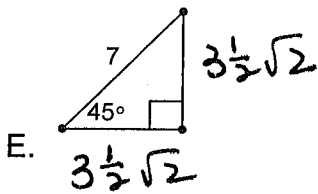
8. $4L\sqrt{2} = 8\sqrt{2}$
 $L = 2$

Find the missing sides:

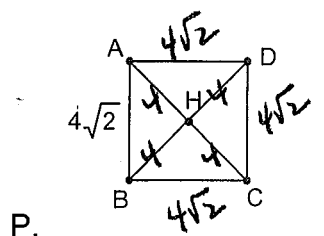
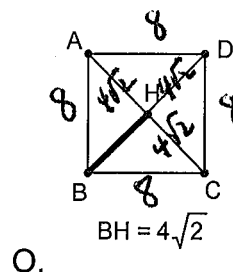
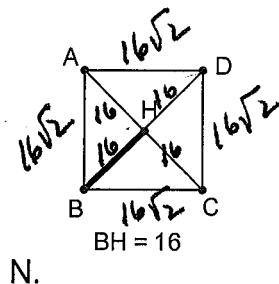
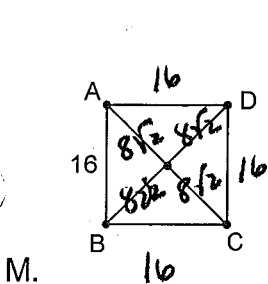
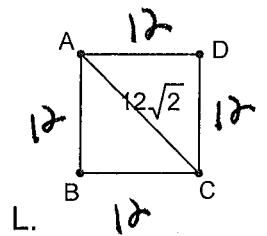
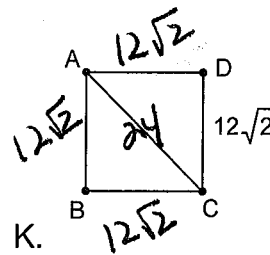
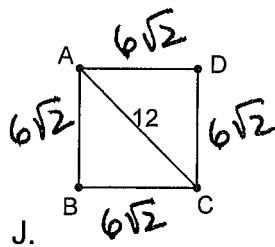
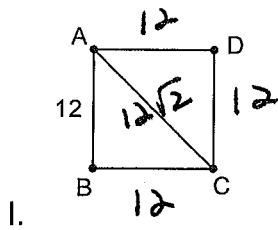
$\frac{6}{\sqrt{2}} \left(\frac{\sqrt{2}}{\sqrt{2}}\right) = \frac{6\sqrt{2}}{2}$

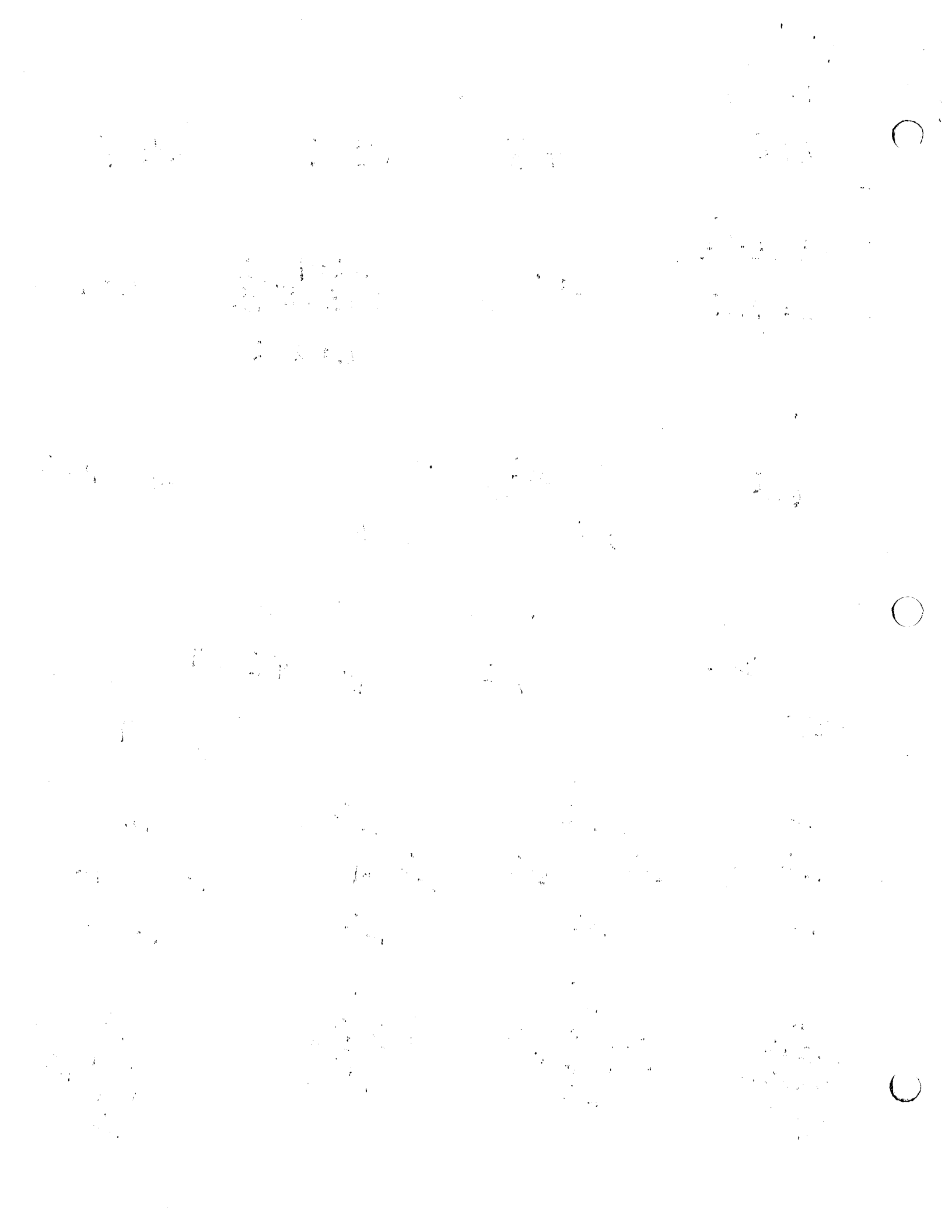


$\frac{7\sqrt{2}}{\sqrt{2}} = \frac{7\sqrt{2}}{2}$



GIVEN: ABCD is a square. Find all missing sides





Using Special Right Triangle Relationships #2

Name _____

1. $\sqrt{3} + \sqrt{3}$

$2\sqrt{3}$

2. $3\sqrt{3} - 6\sqrt{3}$

$-3\sqrt{3}$

3. $\frac{1}{2}\sqrt{2} - \sqrt{2}$

$-\frac{1}{2}\sqrt{2}$

4. $\frac{1}{2}\sqrt{3} - 2\sqrt{3}$

$-1\frac{1}{2}\sqrt{3}$

5. $\frac{1}{2}c\sqrt{3} = 18$

$c\sqrt{3} = 36$

$c = \frac{36}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{36\sqrt{3}}{3}$

$= 12\sqrt{3}$

6. $\frac{1}{2}c\sqrt{3} = 18\sqrt{3}$

$c = 36$

7. $\frac{1}{2}c\sqrt{3} = 9$

$c\sqrt{3} = 18$

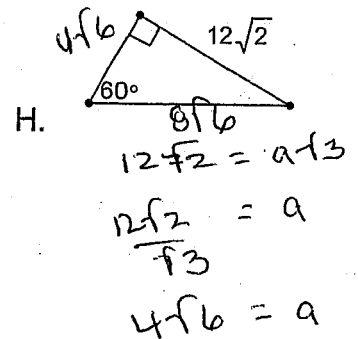
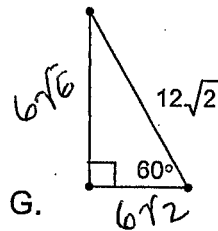
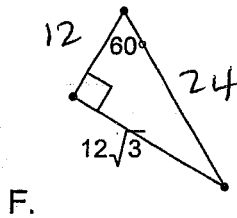
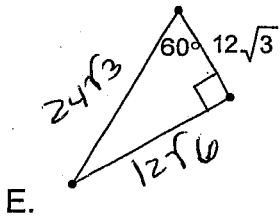
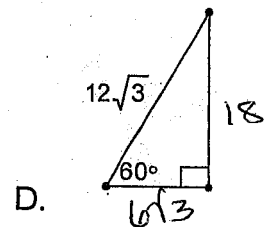
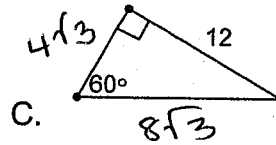
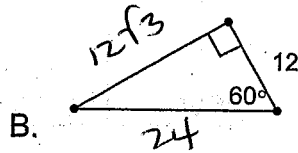
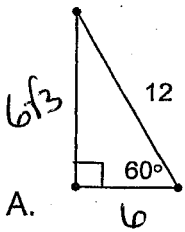
$c = \frac{18}{\sqrt{3}}$

$= 6\sqrt{3}$

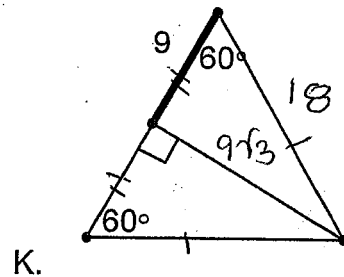
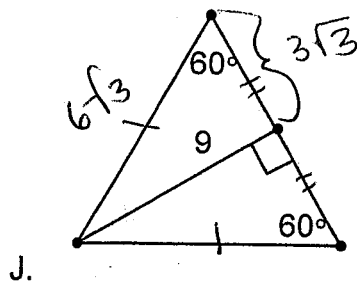
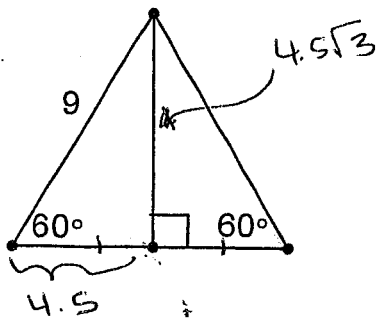
8. $\frac{1}{2}c\sqrt{3} = 9\sqrt{2}$

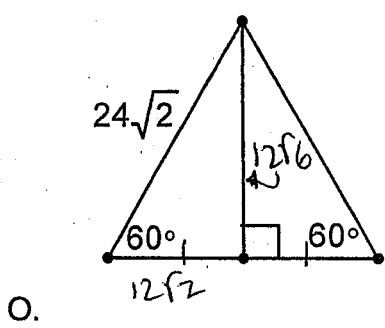
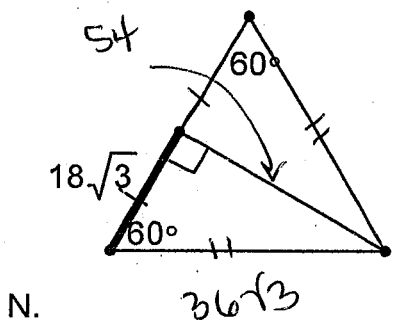
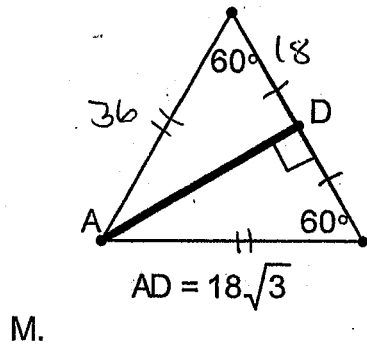
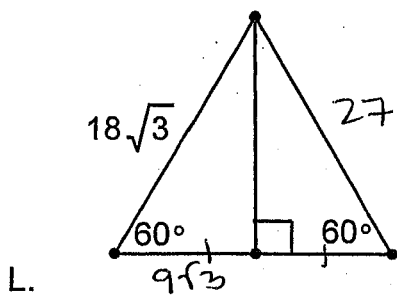
$c = 6\sqrt{6}$

Find the missing sides:



Find all missing sides





GIVEN A REGULAR HEXAGON – Find the missing sides

