



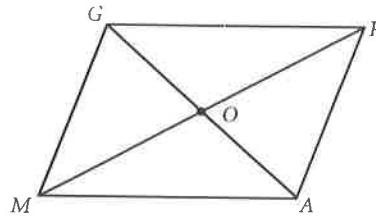
Practice

3.2 Properties of Quadrilaterals

Use your conjectures about quadrilaterals from Activities 1–4 in the textbook to find the indicated measurements.

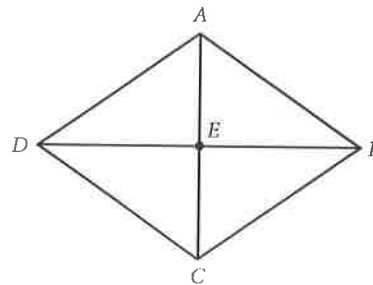
In parallelogram $GRAM$, $MO = 10$, $MA = 16$, $m\angle GMA = 75^\circ$, and $m\angle MRG = 35^\circ$.

- | | |
|------------------------|------------------------|
| 1. $m\angle GRA$ _____ | 2. $m\angle MGR$ _____ |
| 3. RO _____ | 4. GR _____ |
| 5. $m\angle RMA$ _____ | 6. $m\angle GMO$ _____ |



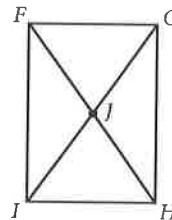
In rhombus $ABCD$, $AB = 6$, $AC = 8$, and $m\angle ABC = 30^\circ$.

- | | |
|-------------------------|-------------------------|
| 7. $m\angle ADC$ _____ | 8. $m\angle AEB$ _____ |
| 9. BC _____ | 10. AE _____ |
| 11. $m\angle BAD$ _____ | 12. $m\angle CED$ _____ |
| 13. CD _____ | 14. EC _____ |



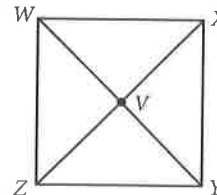
In rectangle $FGHI$, $FG = 8$, $FI = 15$, and $FH = 17$.

- | | |
|----------------|-------------------------|
| 15. HI _____ | 16. GH _____ |
| 17. GI _____ | 18. FJ _____ |
| 19. GJ _____ | 20. $m\angle FIH$ _____ |

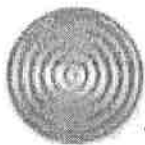


In square $WXYZ$, $WX = 20$ and $WY \approx 28.3$.

- | | |
|-------------------------|-------------------------|
| 21. XY _____ | 22. XZ _____ |
| 23. $m\angle WVX$ _____ | 24. $m\angle XYV$ _____ |



25. In parallelogram $KLMN$, $m\angle K = (3x)^\circ$ and $m\angle L = (2x + 5)^\circ$.
Find x and the measure of each angle in $KLMN$.



Practice

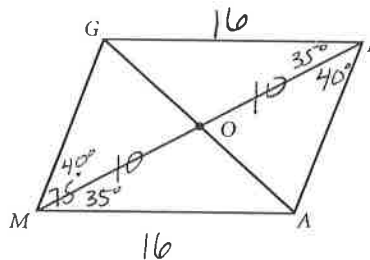
Properties of Quadrilaterals

4.4

Use your conjectures about quadrilaterals from Activities 1-4 in the textbook to find the indicated measurements.

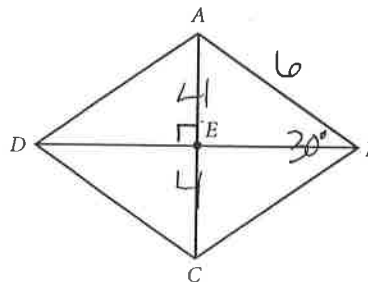
In parallelogram *GRAM*, $MO = 10$, $MA = 16$, $m\angle GMA = 75^\circ$, and $m\angle MRG = 35^\circ$.

- | | | | |
|------------------|------------|------------------|-------------|
| 1. $m\angle GRA$ | <u>75°</u> | 2. $m\angle MGR$ | <u>105°</u> |
| 3. RO | <u>10</u> | 4. GR | <u>16</u> |
| 5. $m\angle RMA$ | <u>35°</u> | 6. $m\angle GMO$ | <u>40°</u> |



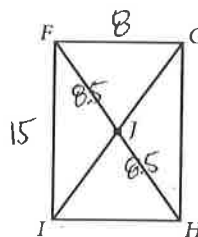
In rhombus *ABCD*, $AB = 6$, $AC = 8$, and $m\angle ABC = 30^\circ$.

- | | | | |
|-------------------|-------------|-------------------|------------|
| 7. $m\angle ADC$ | <u>30°</u> | 8. $m\angle AEB$ | <u>90°</u> |
| 9. BC | <u>6</u> | 10. AE | <u>4</u> |
| 11. $m\angle BAD$ | <u>150°</u> | 12. $m\angle CED$ | <u>90°</u> |
| 13. CD | <u>6</u> | 14. EC | <u>4</u> |



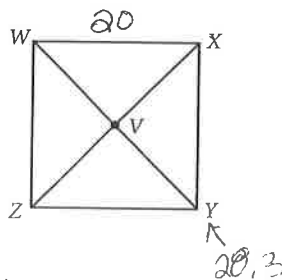
In rectangle *FGHI*, $FG = 8$, $FI = 15$, and $FH = 17$.

- | | | | |
|----------|------------|-------------------|------------|
| 15. HI | <u>8</u> | 16. GH | <u>15</u> |
| 17. GI | <u>17</u> | 18. FJ | <u>8.5</u> |
| 19. GJ | <u>8.5</u> | 20. $m\angle FIH$ | <u>90°</u> |



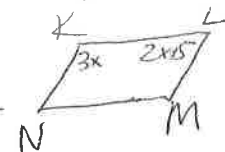
In square *WXYZ*, $WX = 20$ and $WY \approx 28.3$.

- | | | | |
|-------------------|------------|-------------------|-------------|
| 21. XY | <u>20</u> | 22. XZ | <u>28.3</u> |
| 23. $m\angle WVX$ | <u>90°</u> | 24. $m\angle XYV$ | <u>45°</u> |



25. In parallelogram *KLMN*, $m\angle K = (3x)^\circ$ and $m\angle L = (2x + 5)^\circ$. Find x and the measure of each angle in *KLMN*.

$3x + 2x + 5 = 180$ angles $3(35) = 105^\circ$
 $5x + 5 = 180$ $2(35) + 5 = 70 + 5 = 75^\circ$
 $5x = 175$



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$x = 35$