

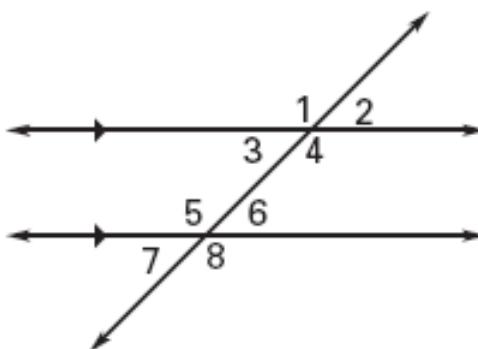
**Find the angle measure. Tell which postulate or theorem you used.**

1. If  $m\angle 1 = 114^\circ$ , then  $m\angle 5 = \underline{\hspace{2cm}}$ ?

2. If  $m\angle 3 = 68^\circ$ , then  $m\angle 6 = \underline{\hspace{2cm}}$ ?

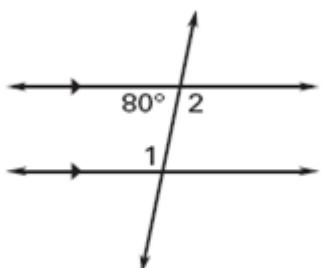
3. If  $m\angle 7 = 64^\circ$ , then  $m\angle 2 = \underline{\hspace{2cm}}$ ?

4. If  $m\angle 5 = 112^\circ$ , then  $m\angle 3 = \underline{\hspace{2cm}}$ ?

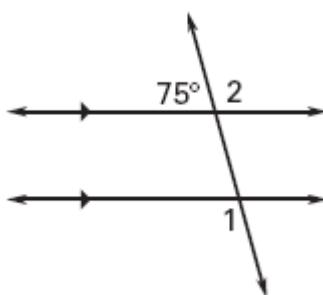


**Find  $m\angle 1$  and  $m\angle 2$ .**

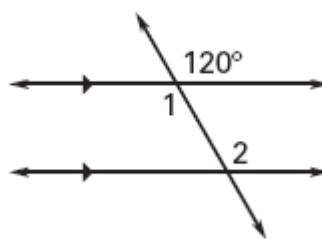
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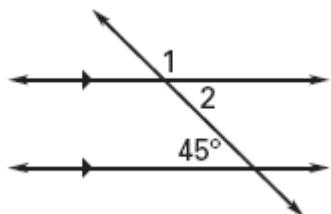
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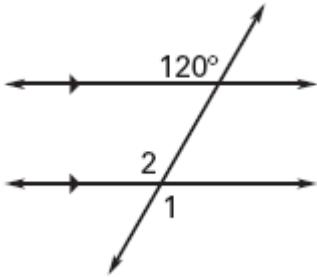
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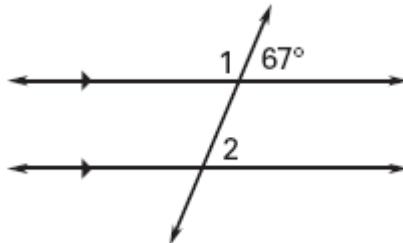
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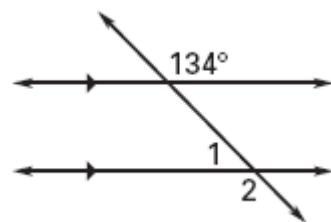
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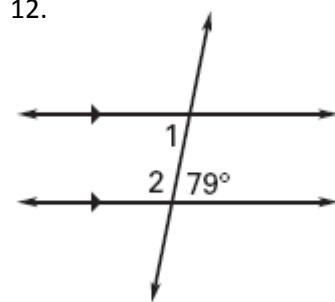
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11.

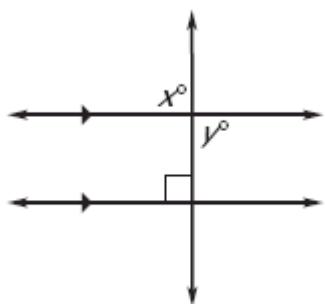


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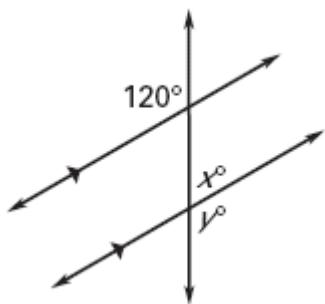


**Find the values of  $x$  and  $y$ .**

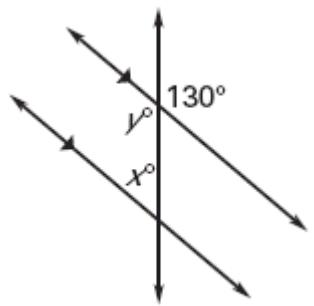
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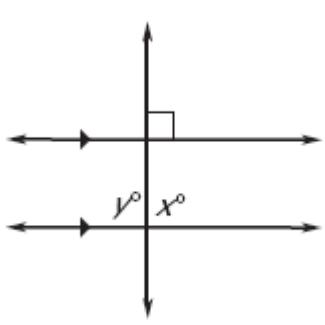
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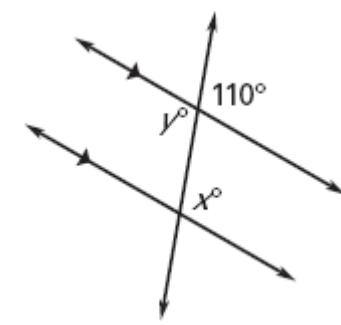
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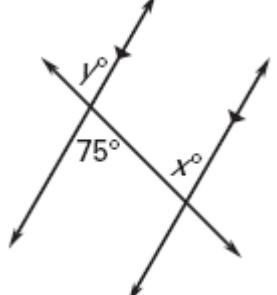
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17.

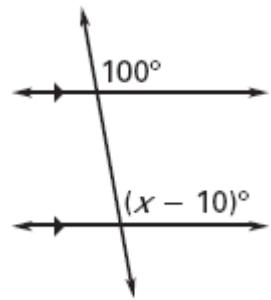


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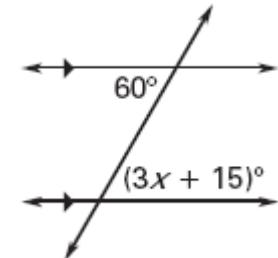


**Find the value of  $x$ .**

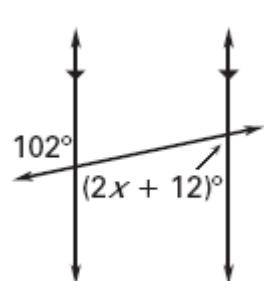
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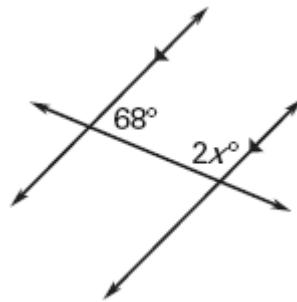
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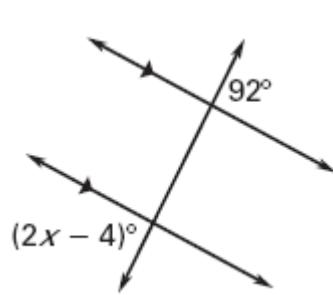
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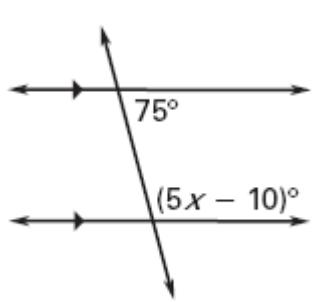
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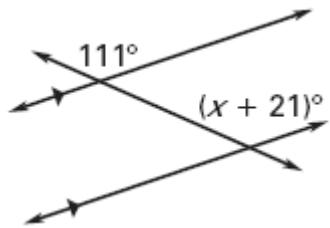
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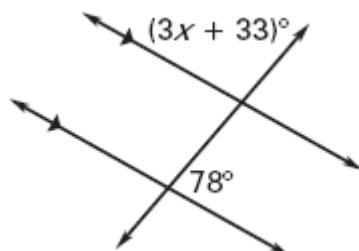
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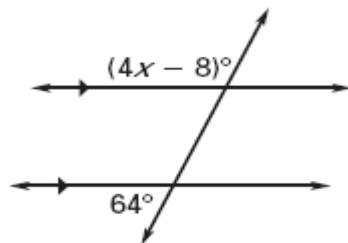
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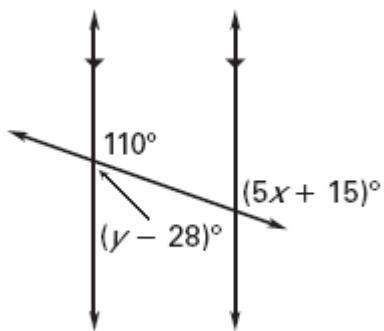
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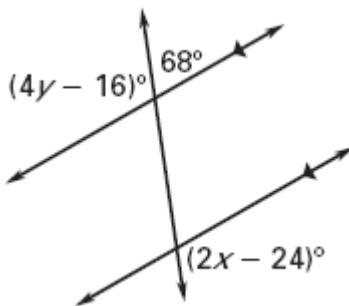
27.

**Find the values of x and y.**

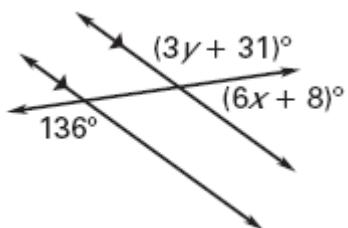
28.



29.



30.

**Answer Key**

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|--|--|--|
| 1.) $114^\circ$ , corresponding angles postulate   | 2.) $68^\circ$ , alternate interior angles theorem   |  |
| 3.) $64^\circ$ , alternate exterior angles theorem | 4.) $68^\circ$ , consecutive interior angles theorem |  |
| 5.) $m\angle 1=100^\circ, m\angle 2=100^\circ$     | 6.) $m\angle 1=105^\circ, m\angle 2=105^\circ$       | 7.) $m\angle 1=120^\circ, m\angle 2=120^\circ$ |
| 8.) $m\angle 1=135^\circ, m\angle 2=45^\circ$      | 9.) $m\angle 1=120^\circ, m\angle 2=120^\circ$       | 10.) $m\angle 1=113^\circ, m\angle 2=67^\circ$ |
| 11.) $m\angle 1=46^\circ, m\angle 2=134^\circ$     | 12.) $m\angle 1=79^\circ, m\angle 2=101^\circ$       | 13.) $x = 90, y = 90$                          |
| 14.) $x = 60, y = 120$                             | 15.) $x = 50, y = 130$                               | 16.) $x = 90, y = 90$                          |
| 17.) $x = 110, y = 110$                            | 18.) $x = 75, y = 75$                                | 19.) $x = 110$                                 |
| 20.) $x = 15$                                      | 21.) $x = 33$  | 22.) $x = 56$                                  |
| 23.) $x = 48$                                      | 24.) $x = 23$  | 25.) $x = 90$                                  |
| 26.) $x = 23$                                      | 27.) $x = 31$  | 28.) $x = 19, y = 98$                          |
| 29.) $x = 68, y = 32$                              | 30.) $x = 6, y = 35$                                 |  |