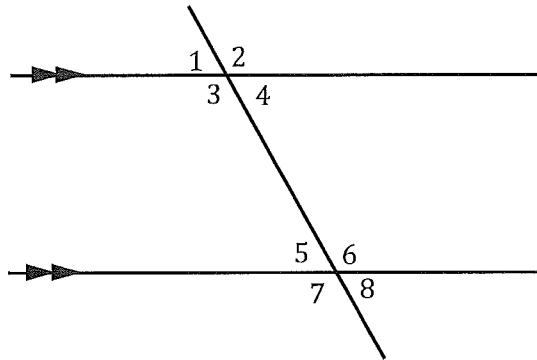




For each, state the angle relationship.



- |   |  |
|---|--|
| 1. Angle $\angle 1$ and $\angle 8$ are...<br><u>alternate exterior angles</u> | 2. Angle $\angle 3$ and $\angle 5$ are...<br><u>consecutive int.</u> |
| 3. Angle $\angle 1$ and $\angle 5$ are...<br><u>corresponding</u>             | 4. Angle $\angle 4$ and $\angle 8$ are...<br><u>corresponding</u>    |
| 5. Angle $\angle 2$ and $\angle 6$ are...<br><u>consecutive int.</u>          | 6. Angle $\angle 4$ and $\angle 5$ are...<br><u>alt. int.</u>        |
| 7. Angle $\angle 2$ and $\angle 7$ are...<br><u>alt. ext.</u>                 | 8. Angle $\angle 3$ and $\angle 6$ are...<br><u>alt. int.</u>        |
| 9. Angle $\angle 4$ and $\angle 6$ are...<br><u>consecutive int.</u>          | 10. Angle $\angle 3$ and $\angle 7$ are...<br><u>corresponding</u>   |

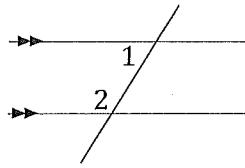
The next set might have some from other sections! You can do it!

- |  |  |
|--|--|
| 11. Angle $\angle 7$ and $\angle 6$ are...<br><u>vertical angles</u> | 12. Angle $\angle 5$ and $\angle 7$ are...<br><u>linear pair</u> |
| 13. Angle $\angle 1$ and $\angle 4$ are...<br><u>vertical</u>        | 14. Angle $\angle 6$ and $\angle 3$ are...<br><u>alt. int.</u>   |
| 15. Angle $\angle 5$ and $\angle 6$ are...<br><u>linear pair</u>     | 16. Angle $\angle 7$ and $\angle 8$ are...<br><u>linear pair</u> |
| 17. Angle $\angle 7$ and $\angle 3$ are...<br><u>corresponding</u>   | 18. Angle $\angle 5$ and $\angle 8$ are...<br><u>vertical</u>    |

Okay good, you're getting faster at it I bet. Let's do some matching. Write the letter of each picture in the right column in the blank next to its description in the left column.

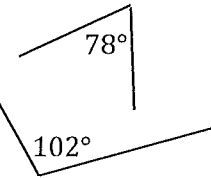
H

1. alternate interior angles



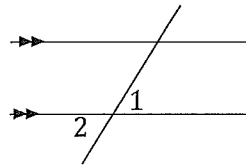
D

2. corresponding angles



I

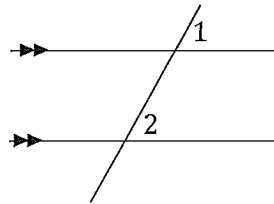
3. alternate exterior angles



E

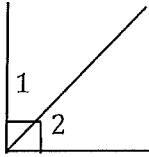
4. complementary angles

*add to 90°*



C

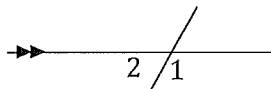
5. vertical angles



B

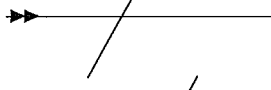
6. supplementary angles

*add to 180°*



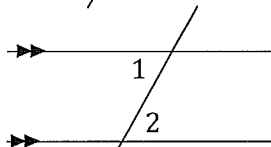
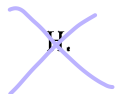
F

7. linear pair



A

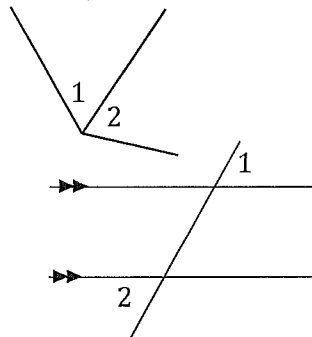
8. consecutive angles



H

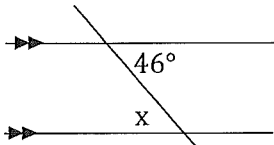
9. adjacent angles

*side by side*



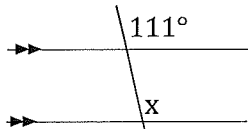
On these state the angle relationship, write a statement about whether they add to  $180^\circ$  or are equal, and solve for  $x$  if necessary.

1. alt. int.



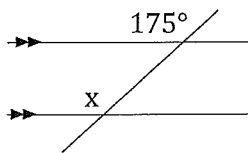
$$x = 46$$

3. corresponding



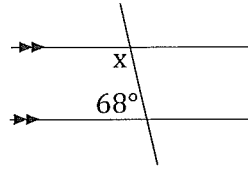
$$x = 111$$

6. corresponding



$$x = 175$$

2. consecutive int.

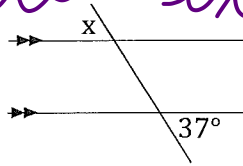


$$x + 68 = 180$$

$$\begin{array}{r} x + 68 = 180 \\ -68 \quad -68 \\ \hline \end{array}$$

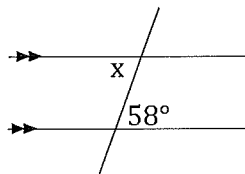
$$x = 112$$

4. alt. ext.



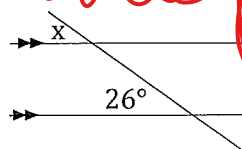
$$x = 37$$

5. alt. int.



$$x = 58$$

7. corresponding



$$x = 26$$

Bubble all the correct answers from above. Don't bubble incorrect answers.

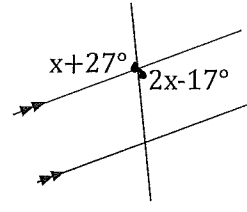
- $37^\circ$ 
  $143^\circ$ 
  $69^\circ$ 
  $46^\circ$ 
  $175^\circ$ 
  $122^\circ$ 
  $58^\circ$ 
  $68^\circ$ 
  $154^\circ$ 
  $26^\circ$ 
  $64^\circ$ 
  $112^\circ$ 
  $75^\circ$ 
  $111^\circ$

vertical

$$x + 27 = 2x - 17$$

$$-x \quad -x$$

8.)

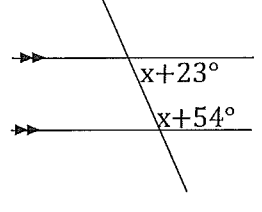


$$27 = x - 17$$

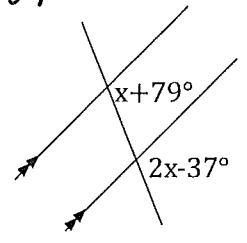
$$+17 \quad +17$$

$$44 = x$$

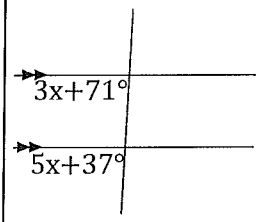
9.)



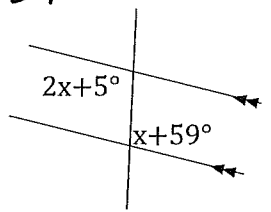
10.)



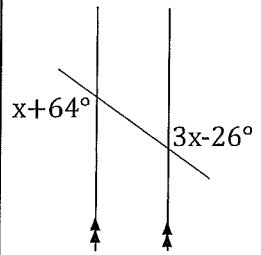
11.)



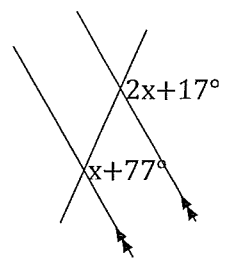
12.)



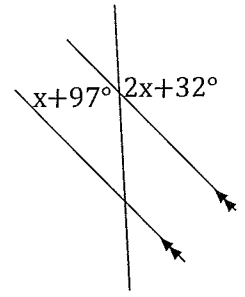
13.)



14.)



15.)



Bubble all the correct answers from above. Don't bubble incorrect answers.

- 31°  
 116°  
 20°  
 17°  
 54°  
 98°  
 51.5°  
 45°  
 60°  
 72.5°  
 65°  
 44°  
 30.5°  
 24°