2 C

1

B

A

Given:
$\overrightarrow{OA} \perp \overrightarrow{OC}$
(not drawn to scale)
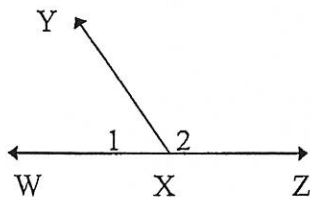
1) $m\angle BOC = 46°$

find $m\angle BOA$

2) $\angle 1 = 3x + 5$

$\angle 2 = 2x - 15$

find $m\angle 1$

3) What is the complement of a 42° angle? _____

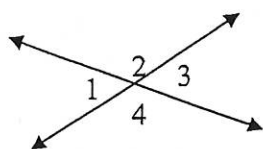4) What does it mean when angles are complementary?

_____

_____

Y

1   2

W   X   Z

5) $m\angle 1 = 62°$

find $m\angle 2$

6) $m\angle 2 = 4x + 2$

$m\angle 1 = x + 8$

Solve for x.

7) How are supplementary angles and complementary angles different?

_____

_____

2   3

1

4

8) Name the vertical angle pairs.

_____

9) $m\angle 4 = 125°$

Find $m\angle 2$ _____

Find $m\angle 1$ _____

10) $\angle 3 = 6x - 12$
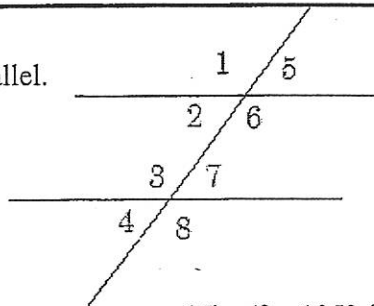
$\angle 1 = 3x + 21$

Find $m\angle 1$

11. What is the complement of 58?　　　　　　12. What is the supplement of 36?

13. What is the complement of 7x?

_____

The following two lines are parallel.
Use the diagrams to answer
the following questions.

$$1 \quad 5$$
$$2 \quad 6$$
$$3 \quad 7$$
$$4 \quad 8$$

14) $\angle 2 = 70°$, find $\angle 7$ _____　　　　15) $\angle 8 = 105°$ find $\angle 3$　　　　16) $\angle 6 = 145°$, find $\angle 7$
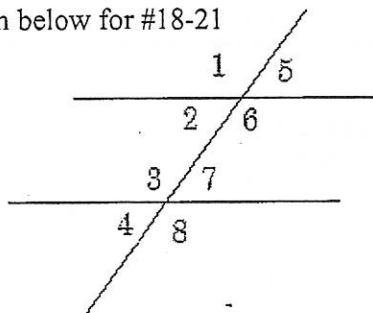
Name the relationship _____　　　_____　　　_____

17) Name all the angles that are supplementary to $\angle 2$. _____

_____

Use the diagram below for #18-21

$$1 \quad 5$$
$$2 \quad 6$$
$$3 \quad 7$$
$$4 \quad 8$$

$\angle 4 = 5x$　　　　　　$\angle 7 = 2x + 40$　　　　　$\angle 1 = 4x - 10$

18) $\angle 7 = 3x + 10$　　19) $\angle 5 = 3x + 20$　　20) $\angle 8 = x + 80$

　　Solve for x.　　　　　　Find m$\angle 3$.　　　　　Find m$\angle 7$

21) $m\angle 5 = 2x$ and $m\angle 6 = 3x$ What equation would you right in order to solve the problem? Explain why.

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