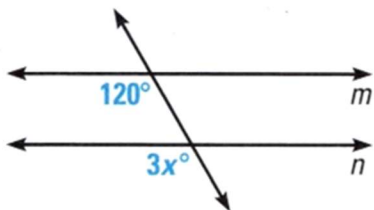# 3.2 Homework
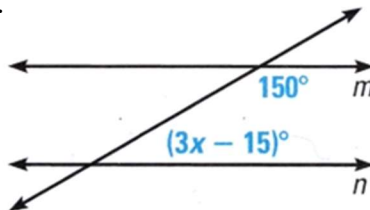
On your own paper, write the answers.

Find the value of x that makes $m \parallel n$. Write the equations. Show the steps for solving.
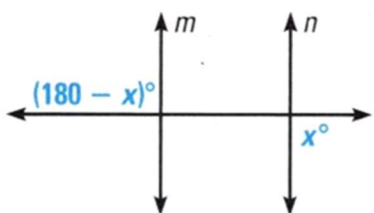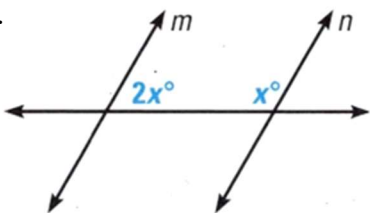
1.

$120°$ m

$3x°$ n

2.

$150°$ m

$(3x - 15)°$

n

3.

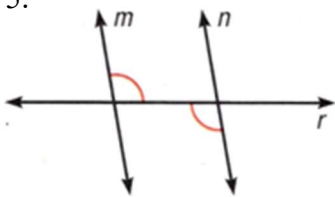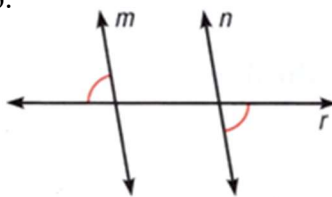m n

$(180 - x)°$

$x°$

4.

m n

$2x°$ $x°$

Is there enough information to prove $m \parallel n$? If so, state the postulate or theorem you would use.

5.

m n

r

6.

m n

r

7.

r

m
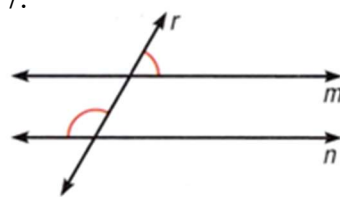
n

8.

m n

r

9.

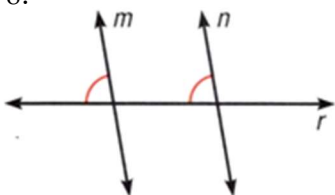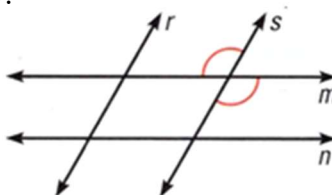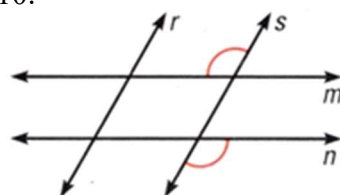r s

m

n

10.

r s

m

n

For problems 11 -13, write the equations. Show the steps for solving

r s

11. Find x so that $p \parallel q$.

$(2x + 2)°$

12. Find y so that $r \parallel s$.

p

13. Can r be parallel to s and p be parallel to q at the same time? Explain.

$(x + 56)°$

q $(y + 7)°$ $(3y - 17)°$