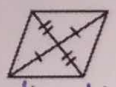
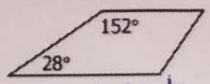
Homework 6·3 Proving Parallelograms Practice

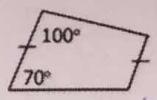
Determine if each quadrilateral is a parallelogram. Explain why or why it does not work.

1) 

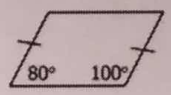
yes-diags bisect

2) 

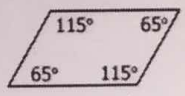
no-only 1 set consec. ∠s supp- Know nothing else.

3) 

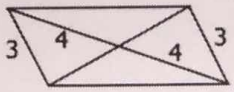
no-only 1 cons. set & 1 cong side set.

4) 

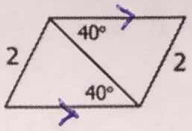
Y

5) 

yes-cons. ∠s are supp.

6) 

No-wrong combos of info.

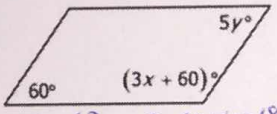
7) 

Y

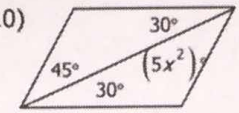
8) 

yes-both opp. sides are parallel

Find the value of x and y that ensure each quadrilateral is a parallelogram.

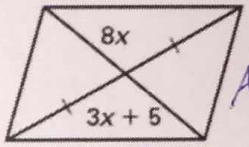
9) 

$5y = 60$ $y = 12$ $3x+60+60=180$ $x=20$

10) 

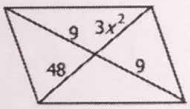
$45 = 5x^2$ $x = 3$ or -3

$x = 3$ or $x = -3$

11) 

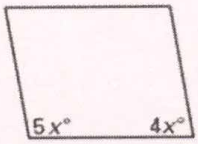
Are these equal?

$8x = 3x + 5$ $x = 1$

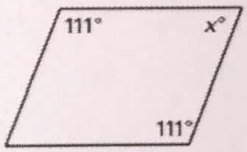
12) 

$3x^2 = 48$

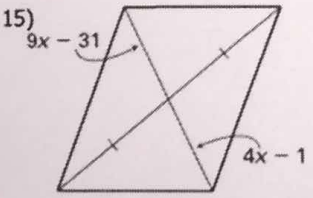
$x = 4$ or $x = -4$

13) 

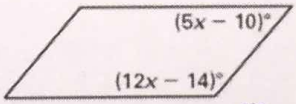
$5x + 4x = 180$ $x = 20$

14) 

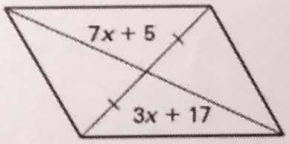
$x = 180 - 111$ $x = 69$

15) 

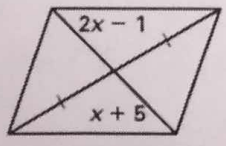
$4x - 1 = 9x - 31$ $x = 6$

16) 

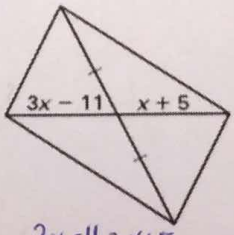
$5x - 10 + 12x - 14 = 180$ $17x = 204$ $x = 12$

17) 

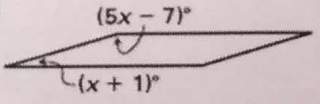
$7x + 5 = 3x + 17$ $4x = 12$ $x = 3$

18) 

$2x - 1 = x + 5$ $x = 6$

19) 

$3x - 11 = x + 5$ $x = 8$

20) 

$x + 1 + 5x - 7 = 180$ $6x = 186$ $x = 31$