Find the measure of each interior angle.

1)

M *96*
150 J $(2x-8)°$ *Sum=360*
$(3x-6)°$ *x = 52*
$(x+10)°$ $x°$
K L
62   *52*

2) A *90* E *158*   *Sum = 540*
$(2x+10)°$ *x = 74*
$x°$ D
74
90 $(2x-20)°$
B C *128*
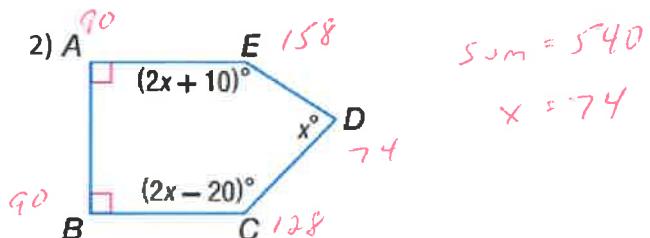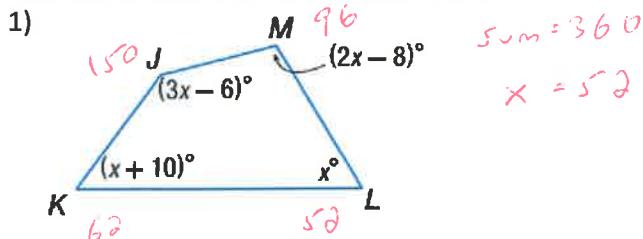
Find the value of x in the diagram.

3)

$(2x-5)°$
$(3x+10)°$ $5x°$
$2x°$
$(6x-5)°$
20

4)

$6x°$
$139°$
$2x°$ $9x°$
13

5)

$21°$ $42°$
$(x-20)°$ $29°$
$(x+14)°$
$(x-10)°$
$x°$
71
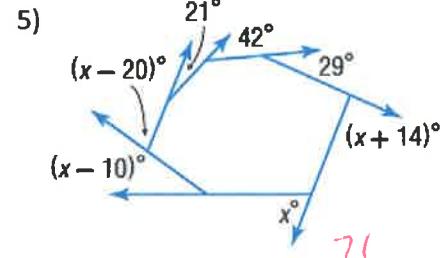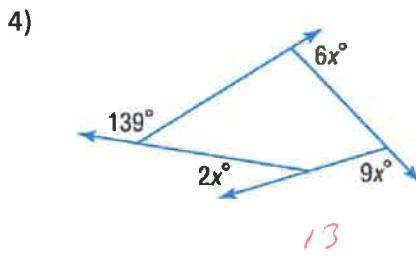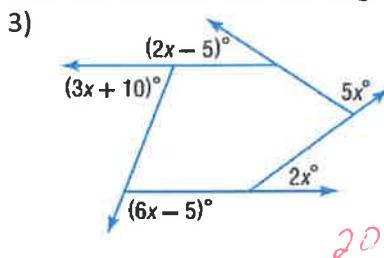
Find the sum of the measures of the interior angles for the given polygon.

6) hendecagon

1620

7) 26-gon

4320

8) 46-gon

7920

Find the measure of an exterior angle (rounded to the tenth) for a regular polygon with the given number of sides.

9) 6   *60*

10) 14-gon   *25.7*

11) 20-gon   *18*

Given the exterior angle of a regular polygon, find the number of sides.

12) 45   *8*

13) 20   *18*

14) 14.4   *25*

Find the measure of an interior and an exterior angle of a regular polygon, given the number of sides.

15) 30   *int 168*
ext 12

16) 14   *int 154.3*
ext 25.7

17) 16   *int 157.5*
ext 22.5

Given the measure of an interior angle of a regular polygon, find the number of sides.

18) 176.4   *100*

19) 165.6   *25*

20) 135   *8*