Geometry

Name_____

5.13.2 WS Area of Regular Polygons

Date_____ Period____

Find the area of each regular polygon. Round your answer to the nearest tenth if necessary.

1)

16

13.9

2)

13.7

10

3)

8

9.7

4)

24.2

7

5)

11

9.1

6)

27.7

33.5

7)

16.9

14

8)

72
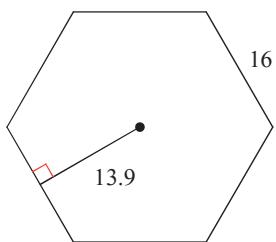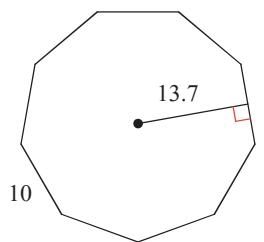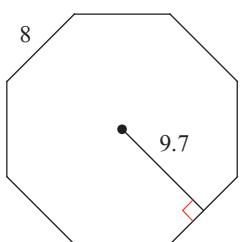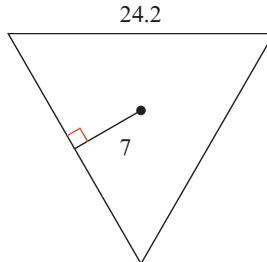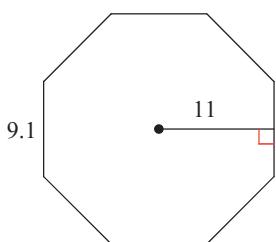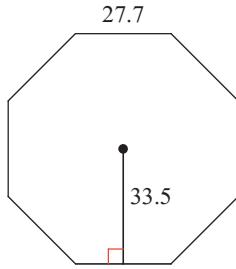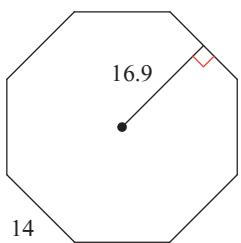
20.8
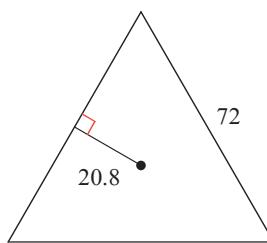
9) 7-gon
   apothem = 10
   side = 9.6

10) triangle
   apothem = 4
   side = 14

11) octagon
   apothem = 11.9
   side = 9.9

12) triangle
   apothem = 4.6
   side = 16

13) 7-gon
   apothem = 13
   side = 12.5

14) pentagon
   apothem = 9
   side = 13.1

**Find the area of each figure. Round your answer to the nearest tenth.**

15)

8 km
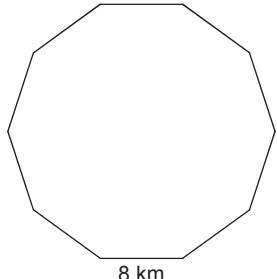
A) 492.4 km²   B) 517.8 km²
C) 984.9 km²   D) 168.2 km²

16)

2 ft
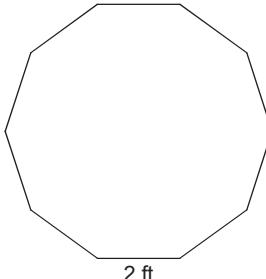
A) 30.8 ft²   B) 10.5 ft²
C) 32.4 ft²   D) 61.6 ft²

17)

8 km
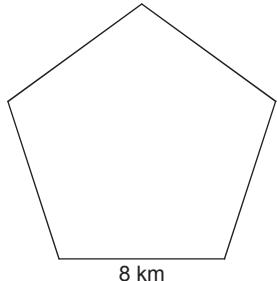
A) 98.9 km²   B) 110.1 km²
C) 136.1 km²   D) 220.2 km²

18)

3 cm
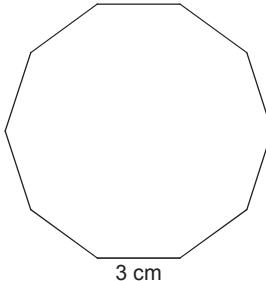
A) 23.7 cm²   B) 138.5 cm²
C) 72.8 cm²   D) 69.2 cm²

Find the area of each shape...

1.

15cm

2cm

3cm

7cm

2.

9ft

6ft

3ft

4ft

3.

17in

10in

13in

7in

4.

26m

18m

4m

39m

5.

12cm

7cm

10cm

8cm

6.

16in

6in

10in

10in
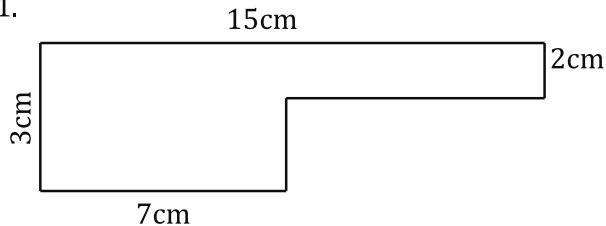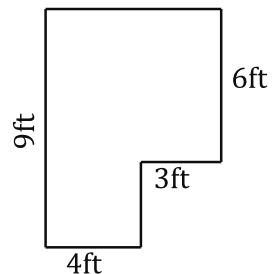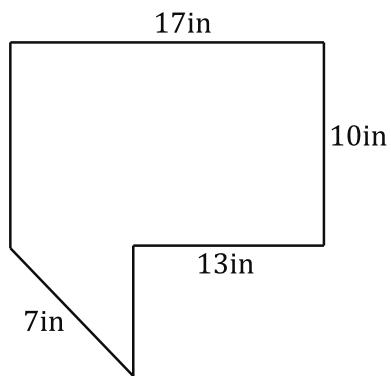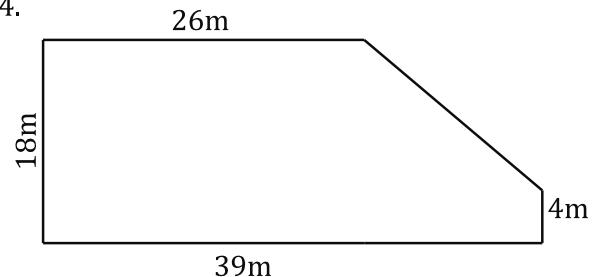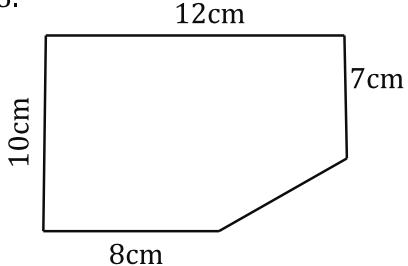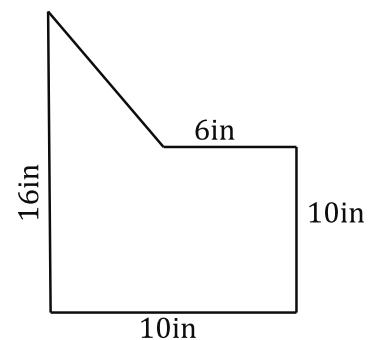
Bubble all the correct answers from above. Don't bubble incorrect answers.

○ 54   ○ 11.36   ○ 78   ○ 114   ○ 77   ○ 112   ○ 611   ○ 632   ○ 37   ○ 181.48

7.

7in

5in

13in

13in

8. Find the shaded area.

4in
15in
7in

19in

9. Find the shaded area.

2in 2in
2in 2in

10in

10in

10. Find the shaded area.

4in

4in

8in

18in
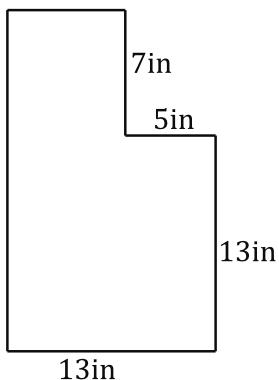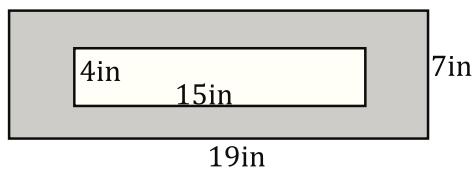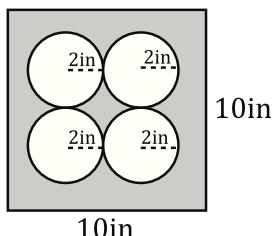
11. Find the shaded area.

32ft

16ft

4ft

6ft
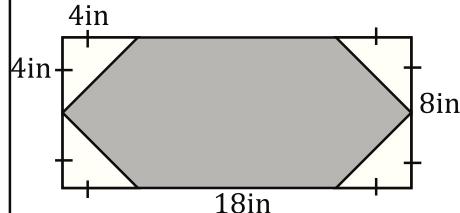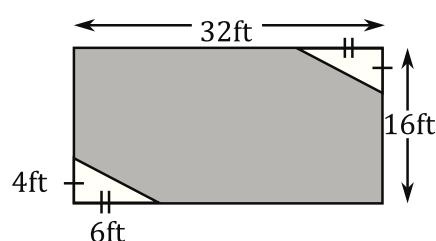
12. Find the shaded area.

13cm

8cm

3cm

4cm
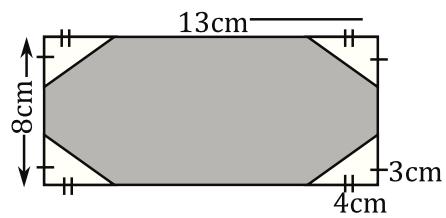
Bubble all the correct answers from above. Don't bubble incorrect answers.

○ 436   ○ 80   ○ 59.72   ○ 58.38   ○ 112   ○ 488   ○ 225   ○ 73   ○ 76   ○ 123