Math 1   Name_____

PRACTICE Test 6   (48 points total)   Period_____

Find the midpoint of the line segment with the given endpoints.

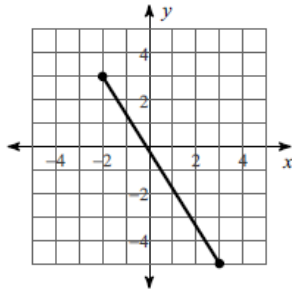1) $(-7, 1)$, $(1, 1)$

    A) $(9, 1)$ B) $(-4, 0)$

    C) $(-3, 1)$ D) $(-1, -7)$

2) $(-10, 9.6)$, $(1.2, 8.2)$

    A) $(-4.4, 8.9)$ B) $(12.4, 6.8)$
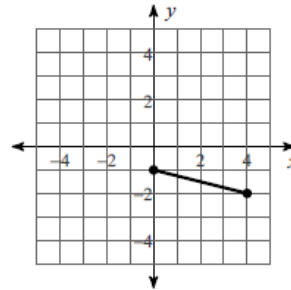
    C) $(-5.6, 0.7)$ D) $(-0.2, 4.7)$

Find the midpoint of each line segment. Give answer in reduced fraction form.

3)

    A) $(8, -13)$ B) $\left(\frac{1}{2}, -1\right)$

    C) $\left(-1\frac{1}{2}, -5\frac{1}{2}\right)$ D) $\left(-2\frac{1}{2}, 4\right)$

4)

    A) $\left(1, -\frac{1}{2}\right)$ B) $(-4, 0)$

    C) $\left(2, -\frac{1}{2}\right)$ D) $\left(2, -1\frac{1}{2}\right)$

Find the other endpoint of the line segment with the given endpoint and midpoint.

5) Endpoint: $(-9, -4)$, midpoint: $(8, 4)$

    A) $(25, 12)$ B) $\left(-6\frac{1}{2}, 6\right)$

    C) $\left(0, 9\frac{1}{2}\right)$ D) $\left(-8\frac{1}{2}, -4\right)$

6) Endpoint: $(-4, 6)$, midpoint: $(6, 1)$

    A) $\left(-5, 2\frac{1}{2}\right)$ B) $(16, -4)$

    C) $\left(1, 3\frac{1}{2}\right)$ D) $\left(\frac{1}{2}, 2\right)$

Find the distance between each pair of points. Give answer in simplified radical form.
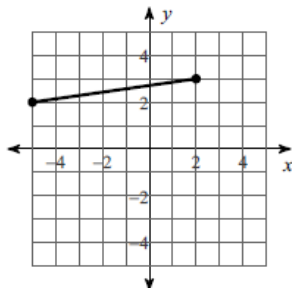
7) $(-2, 6)$, $(4, -2)$

    A) $2\sqrt{5}$ B) 10

    C) $2\sqrt{3}$ D) $\sqrt{14}$

8) $(-6, -4)$, $(6, 6)$

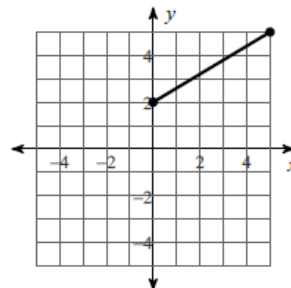   A) 2 B) $\sqrt{2}$

    C) $\sqrt{22}$ D) $2\sqrt{61}$

9)

    A) $2\sqrt{2}$ B) $\sqrt{34}$

    C) 4 D) $5\sqrt{2}$

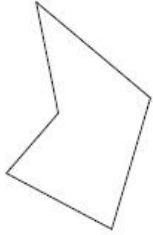10)

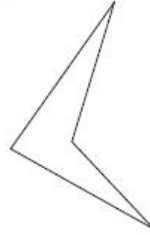   A) $2\sqrt{2}$ B) $\sqrt{2}$

    C) $\sqrt{34}$ D) 10

Write the name of each polygon.

11)

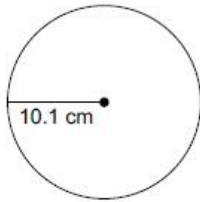A) pentagon   B) nonagon
C) hexagon   D) octagon

12)

A) pentagon   B) nonagon
C) quadrilateral   D) hexagon

Find the circumference of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.
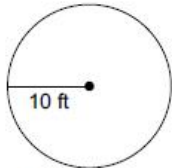
13)

10.1 cm

A) 20 cm   B) 66.6 cm
C) 127 cm   D) 63.5 cm

14) area = 113.1 yd²
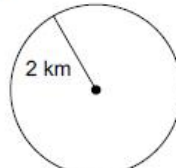
A) 37.7 yd   B) 15.4 yd
C) 41.5 yd   D) 44 yd

Find the area of each. Use your calculator's value of π. Round your answer to the nearest tenth.

15)

10 ft

A) 359.7 ft²   B) 373.3 ft²
C) 346.4 ft²   D) 314.2 ft²

16)

2 km

A) 15.2 km²   B) 6.3 km²
C) 50.4 km²   D) 12.6 km²

Find the radius of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.

17) circumference = 34.6 in

A) 2.8 in   B) 6 in
C) 5.5 in   D) 6.1 in

18) area = 28.3 mi²

A) 3.2 mi   B) 1.7 mi
C) 6 mi   D) 3 mi

Find the diameter of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.
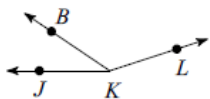
19) circumference = 25.1 in

A) 16 in   B) 8.8 in
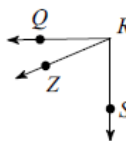C) 8 in   D) 10 in

20) area = 254.5 cm²

A) 19.6 cm   B) 19 cm
C) 6 cm   D) 18 cm
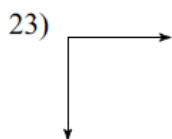
Math 1   Name_____

PRACTICE Test 6   Period____

21) Find $m\angle JKB$ if $m\angle BKL = 128°$
    and $m\angle JKL = 162°$.

22) Find x if $m\angle SRQ = 89°$, $m\angle SRZ = x + 79$,
    and $m\angle ZRQ = x + 34$.

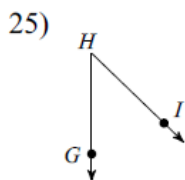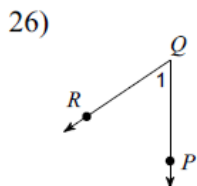**Classify each angle as acute, obtuse, right, or straight.**
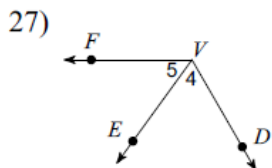
23)

24) 107°

Name the vertex and sides of each angle. (1/2 pt for each)

25)

Name each angle in four ways. (1/2 pt for each)

26)

Name the three angles that have V as a vertex. (1/2 pt for each)

27)

Each figure shows a triangle with one of its angle bisectors.

28) Find $m\angle 1$ if $m\angle 2 = 22°$.

29) Find $m\angle 2$ if $m\angle 2 = 3x + 9$ and $m\angle DFE = 8x - 2$.

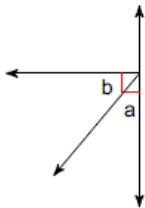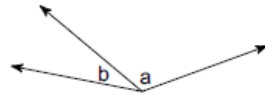**Name the relationship: complementary, linear pair, vertical, or adjacent.**
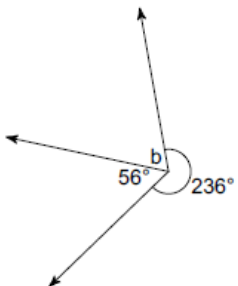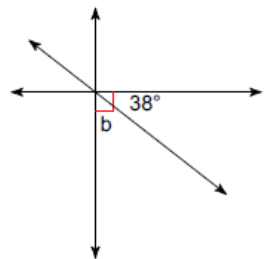
30)

31)

32)

33)

Find the measure of angle b.

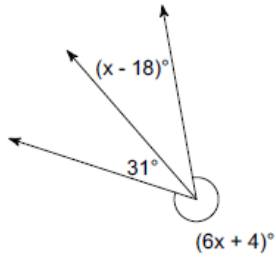34)

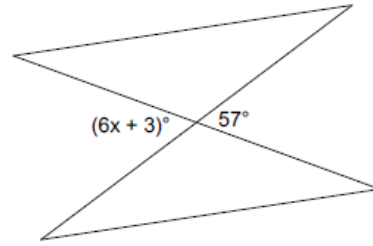35)

Find the value of x.
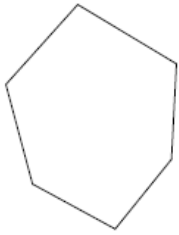
36)

(x - 18)°

31°

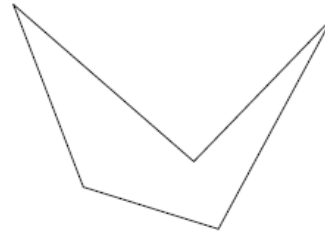(6x + 4)°

37)

(6x + 3)°   57°
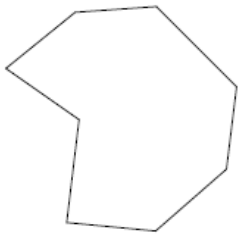
State if each polygon is concave or convex.
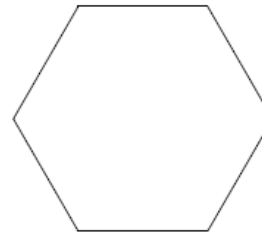
38)

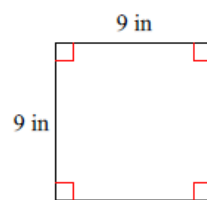39)

State if each polygon looks regular or not.

40)

41)

Find the area of each.

42)

5.7 m

11 m

43)

9 in

9 in

Find the missing measurement. Round your answer to the nearest tenth.

44)

4 in

? in

4 in

Area = 7.2 in²

45)

8.8 m

? m

10.5 m

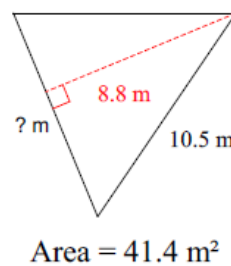Area = 41.4 m²

Math 1   Name_____

PRACTICE Test 6   (48 points total)   Period_____

Find the midpoint of the line segment with the given endpoints.
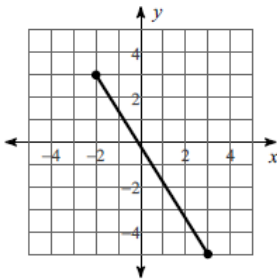
1) $(-7, 1),\ (1, 1)$

  A) $(9, 1)$ B) $(-4, 0)$
 *C) $(-3, 1)$ D) $(-1, -7)$

2) $(-10, 9.6),\ (1.2, 8.2)$

 *A) $(-4.4, 8.9)$ B) $(12.4, 6.8)$
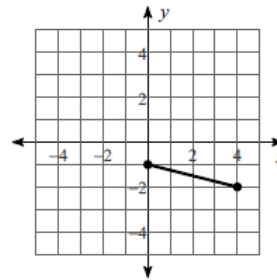 C) $(-5.6, 0.7)$ D) $(-0.2, 4.7)$

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  A) $(8, -13)$ *B) $\left(\dfrac{1}{2}, -1\right)$

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4)

  A) $\left(1, -\dfrac{1}{2}\right)$ B) $(-4, 0)$

  C) $\left(2, -\dfrac{1}{2}\right)$ *D) $\left(2, -1\dfrac{1}{2}\right)$

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 *A) $(25, 12)$ B) $\left(-6\dfrac{1}{2}, 6\right)$

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Find the distance between each pair of points. Give answer in simplified radical form.

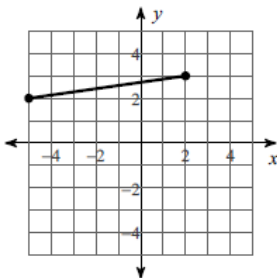7) $(-2, 6),\ (4, -2)$

  A) $2\sqrt{5}$ *B) 10
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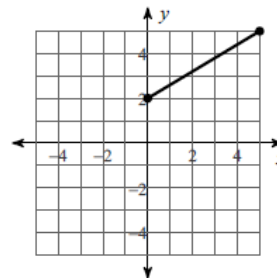
  A) 2 B) $\sqrt{2}$
  C) $\sqrt{22}$ *D) $2\sqrt{61}$

9)

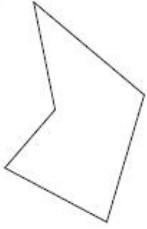 A) $2\sqrt{2}$ B) $\sqrt{34}$
  C) 4 *D) $5\sqrt{2}$

10)

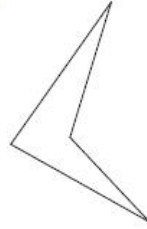 A) $2\sqrt{2}$ B) $\sqrt{2}$
 *C) $\sqrt{34}$ D) 10

Write the name of each polygon.

11)

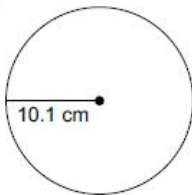*A) pentagon   B) nonagon
C) hexagon   D) octagon

12)

A) pentagon   B) nonagon
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Find the circumference of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.
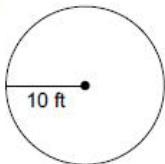
13)

10.1 cm

A) 20 cm   B) 66.6 cm
C) 127 cm   *D) 63.5 cm

14) area = 113.1 yd²
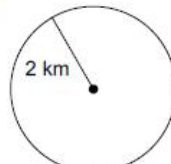*A) 37.7 yd   B) 15.4 yd
C) 41.5 yd   D) 44 yd

Find the area of each. Use your calculator's value of π. Round your answer to the nearest tenth.

15)

10 ft

A) 359.7 ft²   B) 373.3 ft²
C) 346.4 ft²   *D) 314.2 ft²

16)

2 km

A) 15.2 km²   B) 6.3 km²
C) 50.4 km²   *D) 12.6 km²

Find the radius of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.

17) circumference = 34.6 in
A) 2.8 in   B) 6 in
*C) 5.5 in   D) 6.1 in

18) area = 28.3 mi²
A) 3.2 mi   B) 1.7 mi
C) 6 mi   *D) 3 mi

Find the diameter of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.
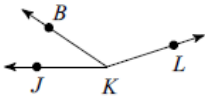
19) circumference = 25.1 in
A) 16 in   B) 8.8 in
*C) 8 in   D) 10 in

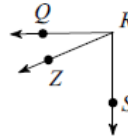20) area = 254.5 cm²
A) 19.6 cm   B) 19 cm
C) 6 cm   *D) 18 cm

PRACTICE Test 6

Period____

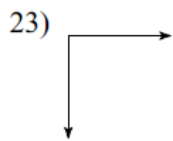21) Find $m\angle JKB$ if $m\angle BKL = 128°$ and $m\angle JKL = 162°$.

34°

22) Find x if $m\angle SRQ = 89°$, $m\angle SRZ = x + 79$, and $m\angle ZRQ = x + 34$.

−12

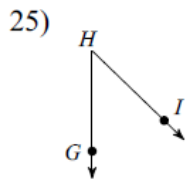**Classify each angle as acute, obtuse, right, or straight.**
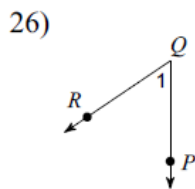
23)

right

24) 107°

obtuse

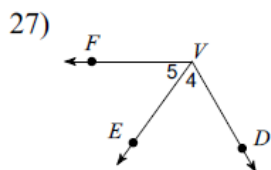**Name the vertex and sides of each angle. (1/2 pt for each)**

25)

$H, \overrightarrow{HI}$ and $\overrightarrow{HG}$

Name each angle in four ways. (1/2 pt for each)

26)

$\angle Q, \angle 1, \angle PQR, \angle RQP$

Name the three angles that have V as a vertex. (1/2 pt for each)

27)

$\angle 4, \angle 5, \angle DVF$

Each figure shows a triangle with one of its angle bisectors.
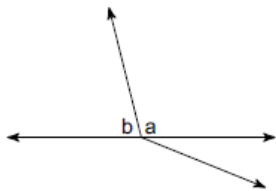
28) Find $m\angle 1$ if $m\angle 2 = 22°$.

U

P

2
1

T ——— V

22°

29) Find $m\angle 2$ if $m\angle 2 = 3x + 9$ and
$m\angle DFE = 8x - 2$.

D ——— F

1
2

P

E

39°

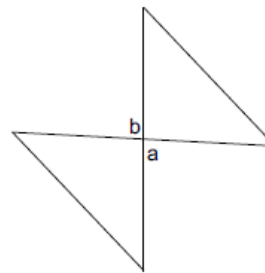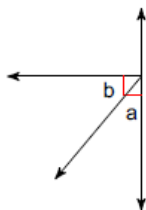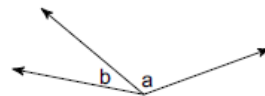**Name the relationship: complementary, linear pair, vertical, or adjacent.**

30)

b a

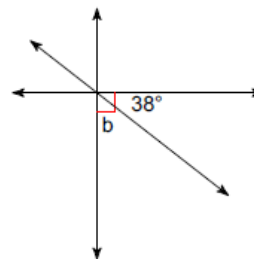linear pair

31)

b
a

vertical

32)

b
a

complementary

33)

b a

adjacent

Find the measure of angle b.

34)

b
56°   236°

68°

35)

38°
b

52°

Find the value of x.

36)

(x - 18)°

31°

(6x + 4)°

49
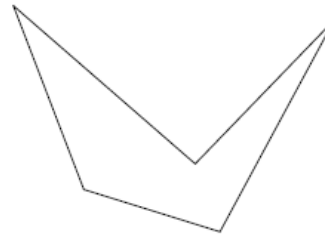
37)

(6x + 3)°   57°

9

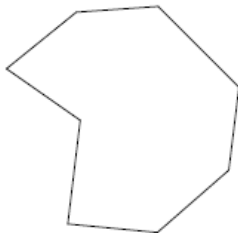**State if each polygon is concave or convex.**

38)

convex

39)

concave

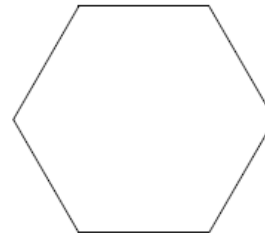**State if each polygon looks regular or not.**

40)

not regular
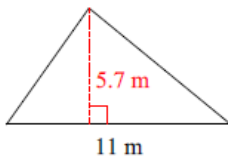
41)

regular

Find the area of each.

42)

5.7 m

11 m

31.35 m²

43)

9 in

9 in

81 in²

Find the missing measurement. Round your answer to the nearest tenth.

44)

4 in

? in

4 in

Area = 7.2 in²

1.8 in

45)

8.8 m

? m

10.5 m

Area = 41.4 m²

9.4 m