

MIAMI DADE COLLEGE
INTERAMERICAN CAMPUS
MATHEMATICS

CPT GEOMETRY

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Convert the units.

1) $31 \text{ km} = \underline{\hspace{1cm}}$ m
A) 0.31 m B) 0.031 m C) 31,000 m D) 3100 m 1)

2) $9.10 \text{ m} = \underline{\hspace{1cm}}$ cm
A) 91.00 cm B) 0.091 cm C) 0.91 cm D) 910 cm 2)

3) $858 \text{ cm} = \underline{\hspace{1cm}}$ m
A) 8.58 m B) 85,800 m C) 85.80 m D) 8580 m 3)

Convert the units using unit fractions.

4) $6.0 \text{ mi} = \underline{\hspace{1cm}}$ ft
A) 880.00 B) 31,680 C) 10,560 D) 2640 4)

5) $75 \text{ ft} = \underline{\hspace{1cm}}$ yd
A) 225 B) 25 C) 8.33 D) 2700 5)

6) $7 \text{ ft} = \underline{\hspace{1cm}}$ in.
A) 84 B) 21 C) 252 D) 28 6)

7) $4 \text{ lb} = \underline{\hspace{1cm}}$ oz
A) 56 B) $\frac{1}{4}$ C) 64 D) 40 7)

Convert the units.

8) $65 \text{ kg} = \underline{\hspace{1cm}}$ g
A) 0.065 g B) 65,000 g C) 0.65 g D) 6500 g 8)

Identify the figure as a line, line segment, or ray and name it using the appropriate symbol.

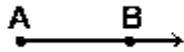
9)



- A) Ray named \overrightarrow{AB} or \overrightarrow{BA}
C) Line named \overleftrightarrow{AB} or \overleftrightarrow{BA}

- B) Line named \overline{AB} or \overline{BA}
D) Line segment named \overline{AB} or \overline{BA}

10)



- A) Line named \overleftrightarrow{AB}
- C) Line named \overline{AB} or \overline{BA}

- B) Ray named \overrightarrow{AB} or \overrightarrow{BA}
- D) Ray named \overrightarrow{AB}

10) _____

11)



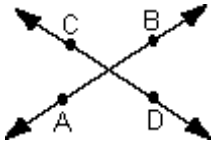
- A) Line named \overline{AB} or \overline{BA}
- C) Line named \overleftrightarrow{AB} or \overleftrightarrow{BA}

- B) Line segment named \overleftrightarrow{AB} or \overleftrightarrow{BA}
- D) Line segment named \overline{AB} or \overline{BA}

11) _____

Identify the pair of lines as parallel, perpendicular, or intersecting.

12)



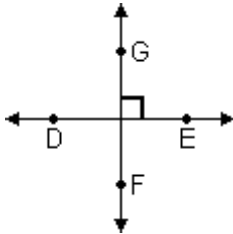
A) Parallel

B) Intersecting

C) Perpendicular

12) _____

13)



A) Intersecting

B) Perpendicular

C) Parallel

13) _____

14)



A) Parallel

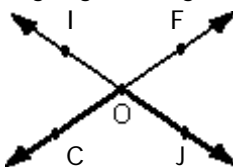
B) Intersecting

C) Perpendicular

14) _____

Name the highlighted angle using the three-letter form of identification.

15)



A) $\angle O$

B) $\angle COJ$ or $\angle JOC$

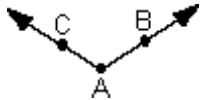
C) $\angle JOF$ or $\angle FOJ$

D) $\angle COI$ or $\angle IOC$

15) _____

Classify the angle as acute, obtuse, straight, or right.

16)



A) Straight

B) Obtuse

C) Right

D) Acute

16) _____

17)



A) Straight

B) Acute

C) Obtuse

D) Right

17) _____

18)



A) Obtuse

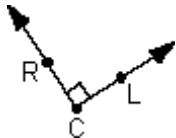
B) Right

C) Straight

D) Acute

18) _____

19)



A) Acute

B) Straight

C) Right

D) Obtuse

19) _____

Find the requested angle.

20) The supplement of 55° .

A) 215°

B) 305°

C) 125°

D) 35°

20) _____

21) The complement of 26° .

A) 334°

B) 244°

C) 154°

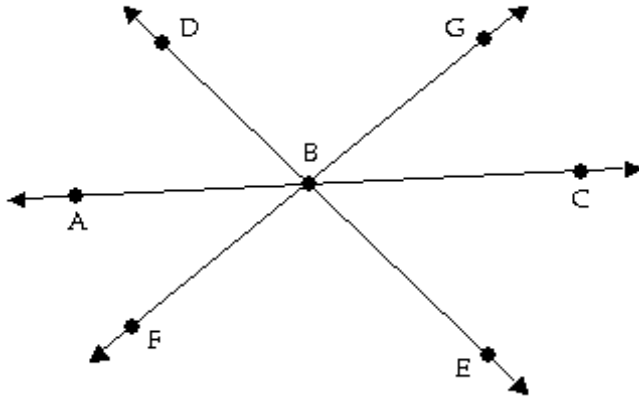
D) 64°

21) _____

Find the measures of the requested angles.

- 22) In the figure, $\angle ABF$ measures 44° and $\angle DBG$ measures 94° . Find the measures of $\angle ABD$, $\angle GBC$, $\angle EBC$, and $\angle FBE$.

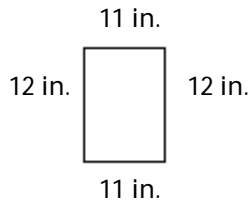
22) _____



- A) $\angle ABD = 46^\circ$, $\angle GBC = 44^\circ$, $\angle EBC = 46^\circ$, and $\angle FBE = 94^\circ$
 B) $\angle ABD = 50^\circ$, $\angle GBC = 42^\circ$, $\angle EBC = 50^\circ$, and $\angle FBE = 134^\circ$
 C) $\angle ABD = 42^\circ$, $\angle GBC = 44^\circ$, $\angle EBC = 42^\circ$, and $\angle FBE = 94^\circ$
 D) $\angle ABD = 44^\circ$, $\angle GBC = 42^\circ$, $\angle EBC = 44^\circ$, and $\angle FBE = 138^\circ$

Find the perimeter and area of the figure.

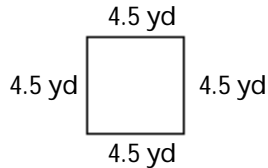
23)



23) _____

- A) $P = 2$ in., $A = 132$ in.²
 B) $P = 44$ in., $A = 264$ in.²
 C) $P = 46$ in., $A = 132$ in.²
 D) $P = 23$ in., $A = 264$ in.²

24)

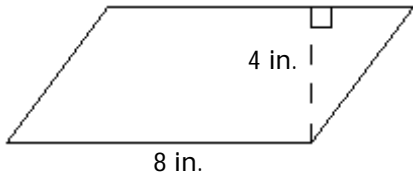


24) _____

- A) $P = 18$ yd, $A = 20.25$ yd²
 B) $P = 40.5$ yd, $A = 20.25$ yd²
 C) $P = 28$ yd, $A = 40.5$ yd²
 D) $P = 9$ yd, $A = 40.5$ yd²

Find the area.

25)



25) _____

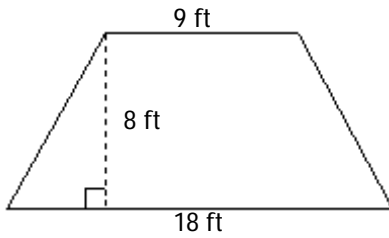
A) 12 in.²

B) 16 in.²

C) 64 in.²

D) 32 in.²

26)



26) _____

A) 108 ft²

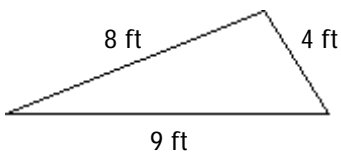
B) 35 ft²

C) 81 ft²

D) 216 ft²

Find the perimeter.

27)



27) _____

A) 18 ft

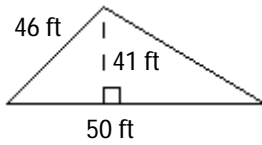
B) 21 ft

C) 20 ft

D) 17 ft

Find the area.

28)



28) _____

A) 2050 ft²

B) 840.5 ft²

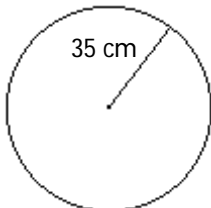
C) 1025 ft²

D) 943 ft²

Find the radius or diameter as requested.

29) Find the diameter.

29) _____



A) 70 cm

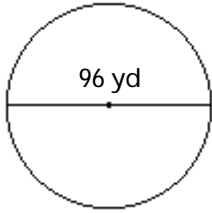
B) 3846.50 cm

C) 17.5 cm

D) 109.9 cm

30) Find the radius.

30) _____



A) 150.72 yd

B) 7234.56 yd

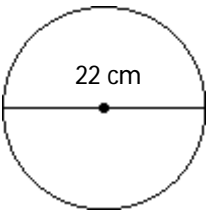
C) 48 yd

D) 24 yd

Find the circle's circumference or area, as requested. Use 3.14 as the approximate value of π , and round your answer to the nearest tenth.

31) Find the circumference.

31) _____



A) 69.1 cm

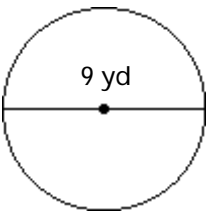
B) 379.9 cm

C) 34.5 cm

D) 138.2 cm

32) Find the area.

32) _____



A) 56.5 yd²

B) 63.6 yd²

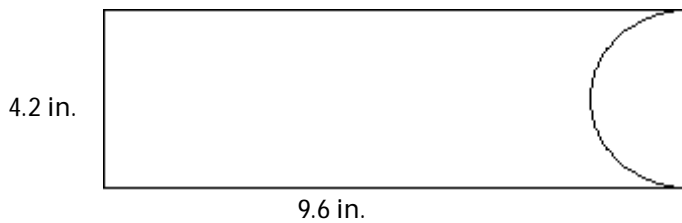
C) 28.3 yd²

D) 254.3 yd²

Find the area of the figure. Use 3.14 for π . Round your answer to the nearest tenth.

33)

33) _____



A) Not enough data

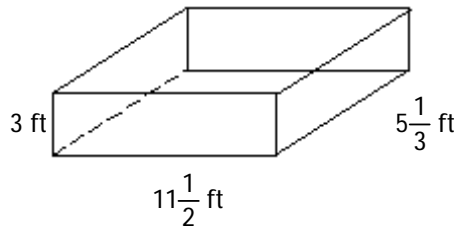
B) 33.7 in.²

C) 33.4 in.²

D) 16.7 in.²

Find the volume.

34)



34) _____

A) $61\frac{1}{3} \text{ ft}^3$

B) $165\frac{1}{6} \text{ ft}^3$

C) $19\frac{5}{6} \text{ ft}^3$

D) 184 ft^3

Find the volume of the specified solid. Use 3.14 as the approximate value of π , and round your answer to the nearest tenth.

35) A sphere with diameter 6 ft

35) _____

A) 113.0 ft^3

B) 37.7 ft^3

C) 904.3 ft^3

D) 63.6 ft^3

36) Find the volume of a cylinder with radius 6 cm and height 8 cm.

36) _____

A) 527.5 cm^3

B) 263.8 cm^3

C) 904.3 cm^3

D) 376.8 cm^3

Find the volume of the specified solid. Use 3.14 as the approximate value of π , and round your answer to the nearest whole number.

37) A cone with height 2 in. and radius 5 in.

37) _____

A) 52 in.^3

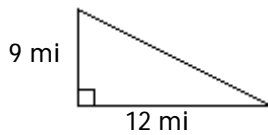
B) 21 in.^3

C) 105 in.^3

D) 79 in.^3

Find the unknown length in the right triangle. If necessary, round to the nearest tenth.

38)



38) _____

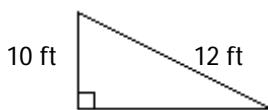
A) 12 mi

B) 15 mi

C) 11 mi

D) 14 mi

39)



39) _____

A) 44 ft

B) 11 ft

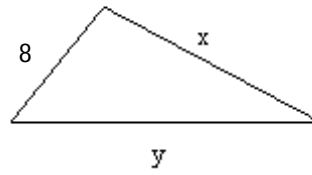
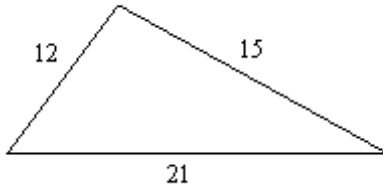
C) 6.6 ft

D) 22 ft

The two triangles below are similar. Find the missing lengths.

40)

40) _____



- A) $x = 7; y = 13$
- C) $x = 10; y = 14$

- B) $x = 12; y = 16$
- D) $x = 22.5; y = 31.5$