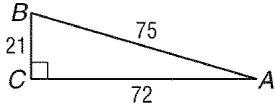


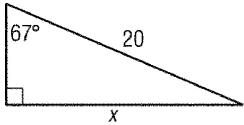
Acc Final Exam Practice 2021**Multiple Choice***Identify the choice that best completes the statement or answers the question.*

- ____ 1. Find $\cos A$ in $\triangle ABC$.



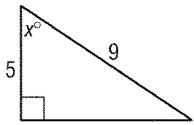
- | | |
|-------------------|--------------------|
| a. $\frac{7}{24}$ | c. $\frac{25}{24}$ |
| b. $\frac{7}{25}$ | d. $\frac{24}{25}$ |

- ____ 2. Find x to the nearest tenth.



- | | |
|----------|---------|
| a. 7.3. | c. 18.4 |
| b. 17.3. | d. 47.1 |

- ____ 3. Find x to the nearest degree.



- | | |
|-------|-------|
| a. 56 | c. 34 |
| b. 45 | d. 29 |

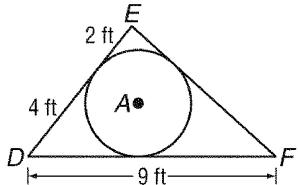
- ____ 4. If $\sin A = 30/34$, find the value of $\sec A$.

- | | |
|-------------------|--------------------|
| a. $\frac{17}{8}$ | c. $\frac{15}{17}$ |
| b. $\frac{8}{17}$ | d. $\frac{17}{15}$ |

- ____ 5. If a 20-foot ladder makes a 65° angle with the ground, how many feet up a wall will it reach? Round your answer to the nearest tenth.

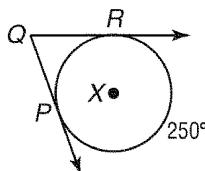
- | | |
|-----------|------------|
| a. 8.5 ft | c. 18.1 ft |
| b. 10 ft | d. 42.9 ft |

- ____ 6. Find the angle of elevation of the sun if a building 100 feet tall casts a shadow 150 feet long. Round to the nearest degree.
- a. 60° c. 42°
 b. 48° d. 34°
- ____ 7. A circle has an area of $169\pi \text{ in}^2$, find the circumference.
- a. 13 c. 13π
 b. 26 d. 26π
- ____ 8. If \overline{DE} , \overline{EF} , and \overline{FD} are tangent to $\odot A$, find EF .



- a. 9 ft c. 7 ft
 b. 8 ft d. 6 ft

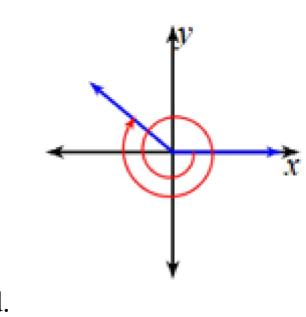
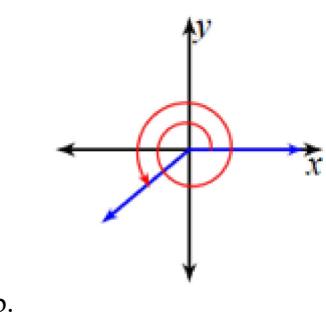
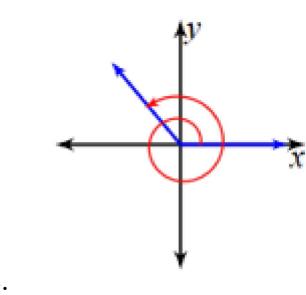
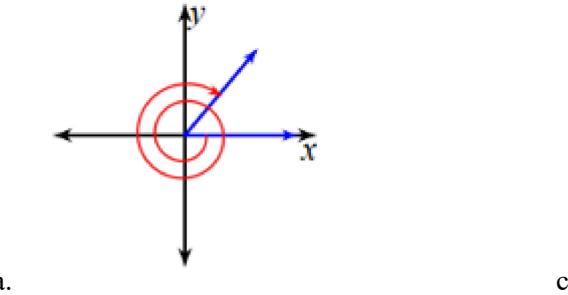
- ____ 9. In $\odot X$, chords \overline{AB} and \overline{CD} are congruent and \overline{AB} is 9 units from X . Find the distance from \overline{CD} to X .
- a. 4.5 units c. 18 units
 b. 9 units d. cannot tell
- ____ 10. Find $m\angle PQR$ if \overrightarrow{QP} and \overrightarrow{QR} are tangent to $\odot X$.



- a. 70 c. 125
 b. 110 d. 140

- ____ 11. Find the exact value of $\cos(-\frac{\pi}{4})$.
- a. $\frac{\sqrt{2}}{2}$ c. $\frac{\sqrt{3}}{2}$
 b. $-\frac{\sqrt{2}}{2}$ d. $-\frac{\sqrt{3}}{2}$

- ____ 12. Sketch the angle -670°



- ____ 13. Find the exact value of $\sin \theta$ if the terminal side of θ in standard position contains the point $(-4, -3)$.

- | | |
|-------------------|------------------|
| a. $-\frac{4}{5}$ | c. $\frac{3}{5}$ |
| b. $-\frac{3}{5}$ | d. $\frac{4}{5}$ |

- ____ 14. Which angle is coterminal with a -400° angle in standard position?

- | | |
|---------------|----------------|
| a. 40° | c. 320° |
| b. 80° | d. 400° |

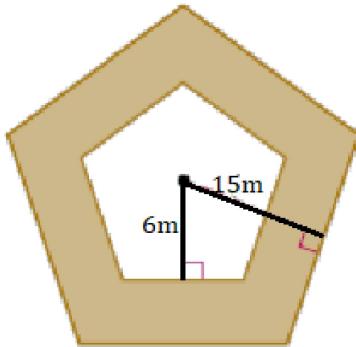
- ____ 15. Find the exact value of $\cos \theta$ if the terminal side of θ in standard position contains the point $(6, -8)$.

- | | |
|-------------------|-------------------|
| a. $-\frac{4}{5}$ | c. $\frac{4}{5}$ |
| b. $\frac{3}{5}$ | d. $-\frac{3}{5}$ |

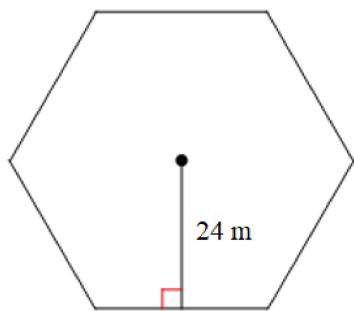
- ____ 16. Given $\cos \theta = \frac{-1}{2}$ and is in Quadrant III, find $\sin \theta$.

- | | |
|--|--------------------------------|
| a. $\sin \theta = \frac{-\sqrt{3}}{2}$ | c. $\sin \theta = \frac{1}{2}$ |
| b. $\sin \theta = \frac{-\sqrt{2}}{2}$ | d. $\sin \theta = 1$ |

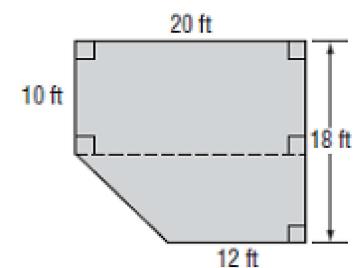
- ____ 17. Find the area of the shaded region if the apothems of the pentagons are 6 m and 15m. Round to the nearest thousandth.



- a. about 1106.467 m^2
b. about 686.565 m^2
c. about 449.374 m^2
d. about 817.350 m^2
e. None of the above
- ____ 18. Find the area of the regular hexagon if the apothem is 24.

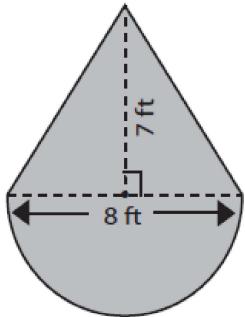


- a. $6\sqrt{3}$ m^2
b. $576\sqrt{3}$ m^2
c. $192\sqrt{3}$ m^2
d. $1152\sqrt{3}$ m^2
- ____ 19. A landscape architect gives the diagram of a yard to a fencing company. What is the area of the yard to be fenced?



- a. 70
b. 264
c. 328
d. 360

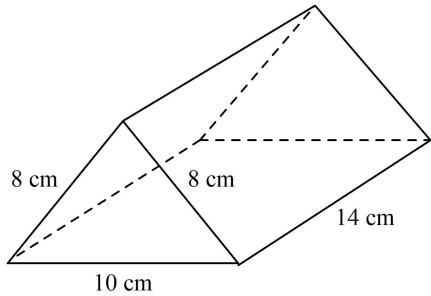
- _____ 20. Find the area of the half circle and triangle composite figure.



- a. $8\pi + 28 \text{ ft}^2$
b. $32\pi + 56 \text{ ft}^2$
c. $8\pi + 7 \text{ ft}^2$
d. $49\pi + 28 \text{ ft}^2$

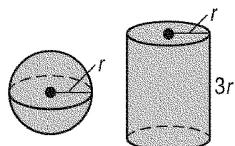
Find the volume of the prism. Round to the nearest tenth if necessary.

- _____ 21.



- a. 1120.0 cm^3
b. 560.0 cm^3
c. 660.4 cm^3
d. 437.1 cm^3

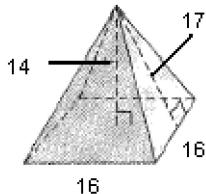
- _____ 22. Which solid has the greater volume?



- a. sphere
b. cylinder
c. The volumes are equal.
d. not enough information

Find the surface area of the solid.

____ 23.

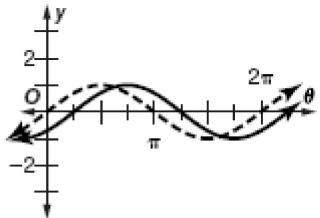


- a. 800 units²
b. 392 units²
c. 704 units²
d. 288 units²

____ 24. Find the amplitude of $y = 6 \sin \theta$.

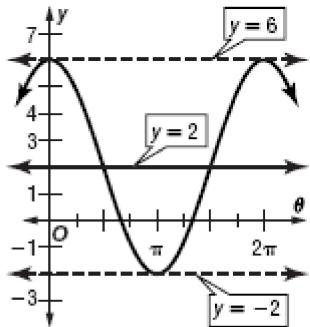
- a. 6
b. π
c. -6
d. 2π

____ 25. Which equation is graphed?



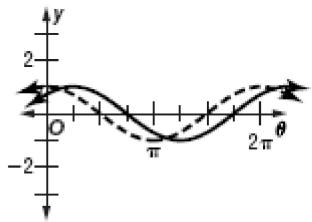
- a. $y = \sin(\theta - \frac{\pi}{4})$
b. $y = \sin(\theta + \frac{\pi}{4})$
c. $y = \cos(\theta - \frac{\pi}{4})$
d. $y = \cos(\theta + \frac{\pi}{4})$

____ 26. Which equation is graphed?



- a. $y = 4 \sin \theta + 2$
b. $y = 4 \sin \theta - 2$
c. $y = 4 \cos \theta + 2$
d. $y = 4 \cos \theta - 2$

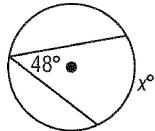
____ 27. Which equation is graphed?



- a. $y = \sin(\theta - \frac{\pi}{4})$ c. $y = \sin(\theta + \frac{\pi}{4})$
b. $y = \cos(\theta - \frac{\pi}{4})$ d. $y = \cos(\theta + \frac{\pi}{4})$

Short Answer

28. Find x .



Acc Final Exam Practice 2021
Answer Section

MULTIPLE CHOICE

1. D
2. C
3. A
4. A
5. C
6. D
7. D
8. C
9. B
10. A
11. A
12. A
13. B
14. C
15. B
16. A
17. B
18. D
19. C
20. A
21. D
22. B
23. A
24. A
25. A
26. C
27. B

SHORT ANSWER

28. 96