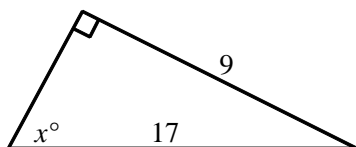


NAME: _____

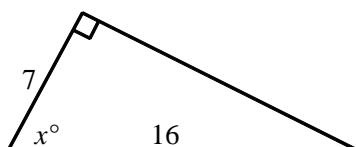
P.I. A.A.43: Find the measure of an angle of a right triangle, given the length of any two sides of the triangle

1. Solve for x to the nearest degree.



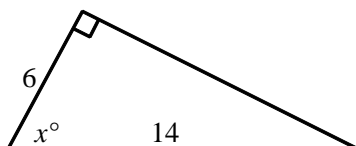
[A] 58 [B] 32 [C] 62 [D] 28

2. Solve for x to the nearest degree.



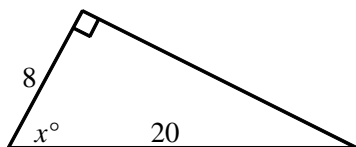
[A] 24 [B] 26 [C] 64 [D] 66

3. Solve for x to the nearest degree.



[A] 23 [B] 25 [C] 65 [D] 67

4. Solve for x to the nearest degree.



[A] 22 [B] 68 [C] 24 [D] 66

5. A large totem pole near Kalama, Washington, is 115 ft tall. On a particular day at noon it casts a 231 ft shadow. What is the sun's angle of elevation at that time?

[A] 29.9° [B] 63.5°

[C] 60.1° [D] 26.5°

6. A large totem pole near Kalama, Washington, is 160 ft tall. On a particular day at noon it casts a 222 ft shadow. What is the sun's angle of elevation at that time?

[A] 46.1° [B] 54.2°

[C] 43.9° [D] 35.8°

7. A large totem pole near Kalama, Washington, is 154 ft tall. On a particular day at noon it casts a 210 ft shadow. What is the sun's angle of elevation at that time?

[A] 47.2° [B] 53.7°

[C] 42.8° [D] 36.3°

8. A large totem pole near Kalama, Washington, is 193 ft tall. On a particular day at noon it casts a 231 ft shadow. What is the sun's angle of elevation at that time?

[A] 33.3° [B] 50.1°

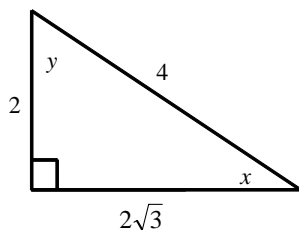
[C] 39.9° [D] 56.7°

9. Find the angle of elevation of the sun when a tree that is 10 yd tall casts a shadow 14 yd long.

10. A spotlight is mounted on a wall 7.4 ft above a security desk in an office building. It is used to light an entrance door 9.3 ft from the desk. Find the angle of depression from the spotlight to the entrance door.

NAME: _____

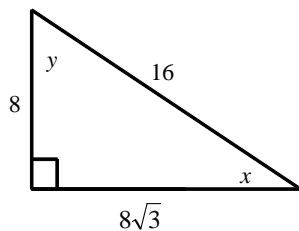
11. Use the right triangle and the table to find the measure of angle y .



	Sine	Cosine	Tangent
30°	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{3}}{3}$
45°	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	1
60°	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$

- [A] 3 [B] 120° [C] 60° [D] $\frac{\pi}{3}$

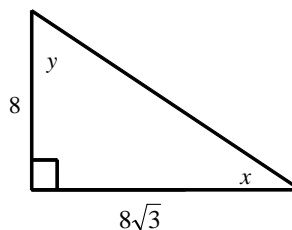
12. Use the right triangle and the table to find the measure of angle y .



	Sine	Cosine	Tangent
30°	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{3}}{3}$
45°	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	1
60°	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$

- [A] 60° [B] $\frac{\pi}{3}$ [C] 12 [D] 120°

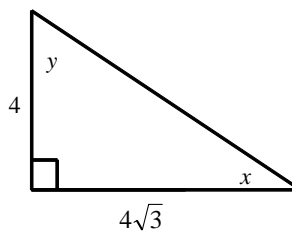
13. Use the right triangle and the table to find the measure of angle y .



	Sine	Cosine	Tangent
30°	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{3}}{3}$
45°	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	1
60°	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$

- [A] 60° [B] 65° [C] 45° [D] 120°

14. Use the right triangle and the table to find the measure of angle y .



	Sine	Cosine	Tangent
30°	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{3}}{3}$
45°	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$	1
60°	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$

- [A] 90° [B] 55° [C] 60° [D] 45°

- [1] B
- [2] C
- [3] C
- [4] D
- [5] D
- [6] D
- [7] D
- [8] C
- [9] about 35.6°
- [10] about 38.5°
- [11] C
- [12] A
- [13] A
- [14] C