Name_____

Block _____ Date_____

**Complete the following without looking at a Unit Circle:**



Positive:
Negative:

Positive:
Negative:

Positive:
Negative:

Positive:
Negative:
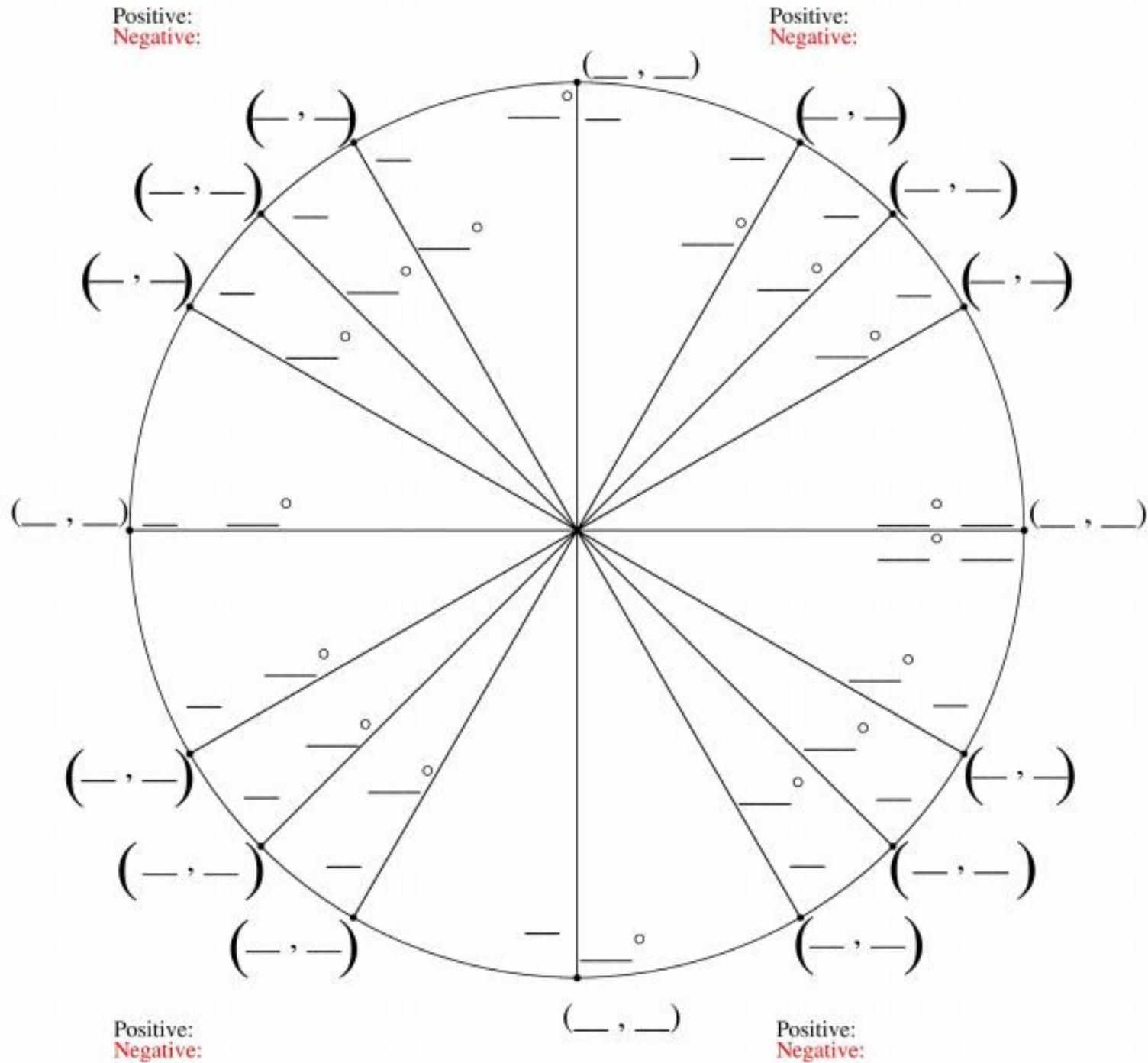
**Find the exact value of each of the following values:**

1. $\cot\frac{3\pi}{2}$

2. $\sec 240°$

3. $\cos\left(-\frac{4\pi}{3}\right)$

4. $\cot 30°$

5. $\cos\frac{3\pi}{4}$

6. $\sin 225°$

7. $\tan\frac{13\pi}{6}$

8. $\cos(60°)$

9. $\tan\frac{5\pi}{3}$

10. $\sec 120°$

11. $\tan\frac{\pi}{2}$

12. $\sin(-270°)$

13. $\csc\left(-\frac{3\pi}{4}\right)$

14. $\sec 330°$

15. $\cot(-\pi)$

16. $\csc(-225°)$

17. $\cot 0°$

18. $\csc 495°$

19. $\csc\frac{5\pi}{6}$

20. $\cos 0°$

21. $\sec \pi$

**For the following triangles solve for x, leave answers in trig form:**

9)



10)



11)



12)
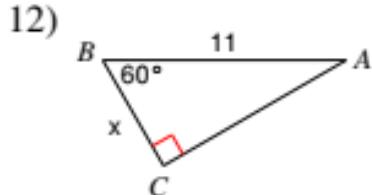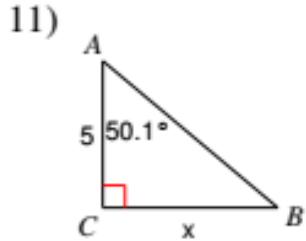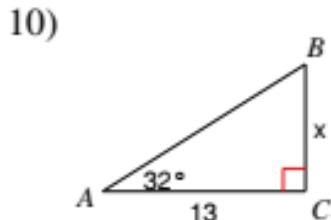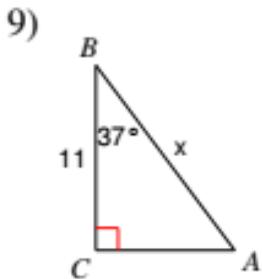
**Find the measures of a positive angle and a negative angle that are coterminal with each given angle.**

4. $\theta = 425°$                 5. $\theta = -316°$                6. $\theta = -800°$

_____     _____     _____

7. $\theta = 281°$                 8. $\theta = -4°$                 9. $\theta = 743°$

_____     _____     _____

**Find the value each trig function, leave in simplified fraction form:**

5) $\csc \theta$

8
$\theta$
$16\sqrt{2}$    24

6) $\cos \theta$

$14\sqrt{2}$
7
$\theta$
21

7) $\cot \theta$

25
15
$\theta$
20

8) $\tan \theta$

24   22
$\theta$
$2\sqrt{23}$
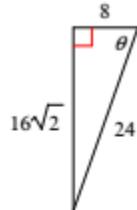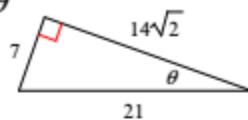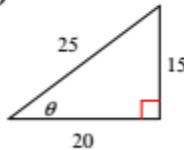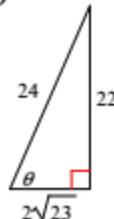
**Convert each measure from degrees to radians or from radians to degrees.**

1. $\dfrac{5\pi}{12}$              2. $215°$              3. $-\dfrac{29\pi}{18}$

_____     _____     _____

4. $-180°$             5. $\dfrac{5\pi}{3}$             6. $-\dfrac{7\pi}{6}$

_____     _____     _____

7. $400°$              8. $\dfrac{3\pi}{10}$            9. $35°$

_____     _____     _____

**Find the exact value of the six trigonometric functions (sin,cos,tan,csc,sec,cot):**

16. 150°                    17. –225°                    18. –300°

_____           _____           _____

19. $\dfrac{11\pi}{6}$              20. $-\dfrac{2\pi}{3}$              21. $\dfrac{5\pi}{4}$

_____           _____           _____

**Use the unit circle to find the exact value of each trigonometric function.**

10. $\cos\dfrac{2\pi}{3}$              11. $\tan\dfrac{5\pi}{4}$              12. $\tan\dfrac{5\pi}{6}$

_____           _____           _____

13. sin 315°              14. cos 225°              15. tan 60°

_____           _____           _____